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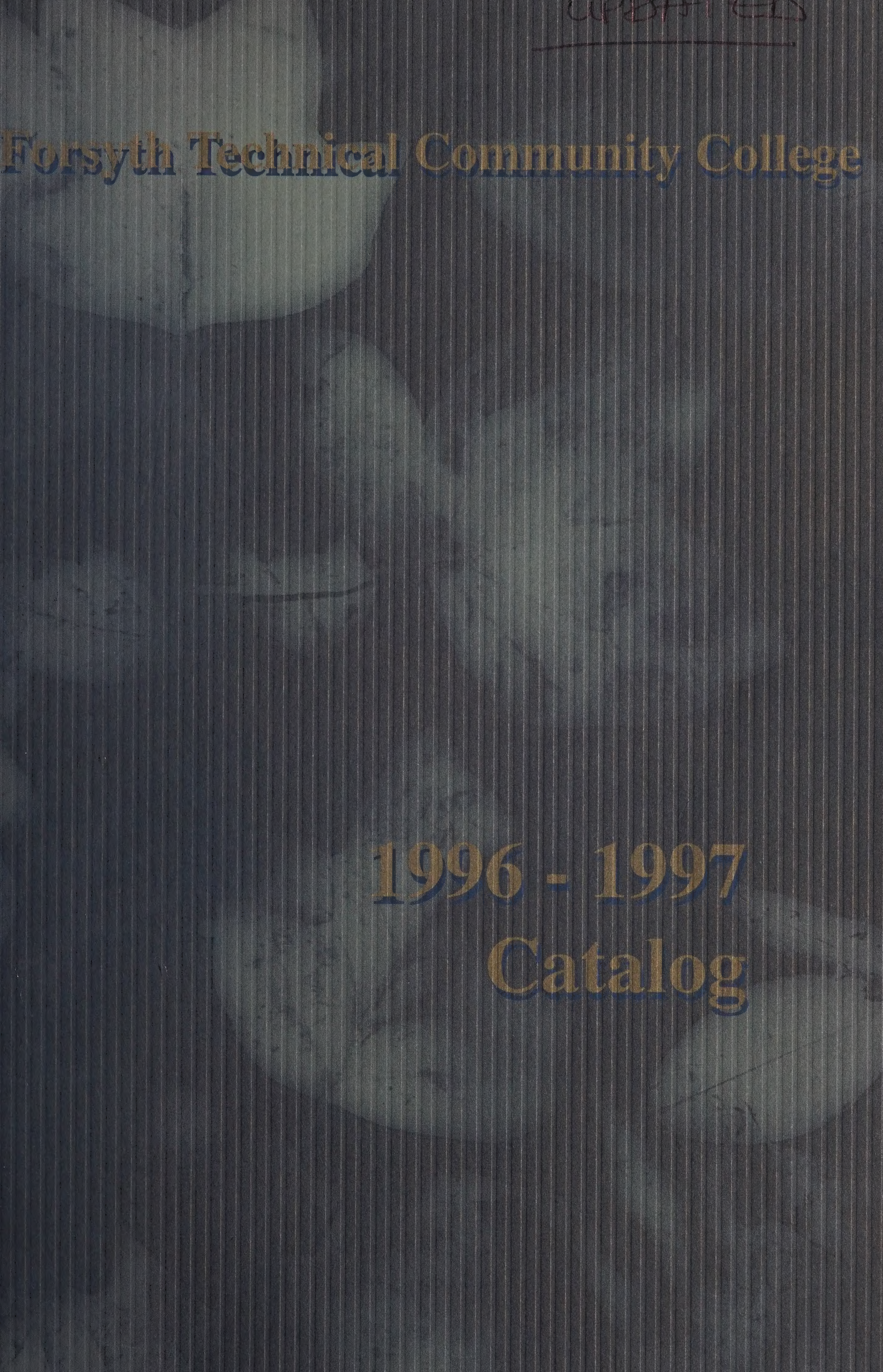

Forsyth Technical Community College

1996 - 1997
Catalog

FORSYTH
TECHNICAL COMMUNITY COLLEGE

General Catalog
1996-1997

Main Campus
2100 Silas Creek Parkway
Winston-Salem, North Carolina 27103-5197
(910) 723-0371

West Campus
1300 Bolton Street
Winston-Salem, North Carolina 27103-5197
(910) 760-2373

All statements in this publication are announcements of present policies and are subject to change at any given time without prior notice. Forsyth Technical Community College reserves the right to make changes in program requirements and offerings, in regulations, and in fees. FTCC also reserves the right to discontinue at any time programs or courses described in this publication. While every effort will be made to give advance notice of any changes of programs or courses, such notice is neither guaranteed nor required. FTCC further reserves the right, at any time, to request the student to withdraw when it considers such action to be in the best interest of the student and FTCC.

FTCC printed 5,000 at a cost of $6,899.00.

An Equal Opportunity Educational Institution

Dr. Desna L.Wallin, President

A MESSAGE FROM THE PRESIDENT

Forsyth Technical Community College and you—a winning combination for your future! By selecting Forsyth Technical Community College as your choice for higher education, you are choosing quality programs and services to move you toward your career and personal goals.

Forsyth Technical Community College is one of North Carolina's fifty-eight community colleges. The college is committed to providing students a quality educational experience at a reasonable cost. The instructional programs are strategically developed and consistently updated to ensure success as you graduate and seek employment, or career advancement, or transfer to a four-year university or college.

Our students are the reason we are here at FTCC. Whether you are seeking a technical degree, planning to transfer to a four-year college or university, updating your current skills, or developing new capabilities, the faculty and staff are here to meet your needs. Our small classes and individual attention make FTCC a very "user-friendly" college.

This catalog describes courses and programs that may very well hold the key to your future educational success and personal happiness. As you review the curriculum offerings, you will find numerous technical and vocational curriculums and a College Transfer curriculum. Your enrollment in, and successful completion of, one of the curriculums may be the best investment you can make toward reaching your educational goals.

Corporate and Continuing Education offers programs for career advancement and self-improvement. Learners may enroll in classes to improve existing skills and/or opportunities to achieve competency in subject areas leading to a high school diploma, or receive instruction in other academic, vocational, or technical fields.

State of the art health technologies facilities and equipment will prepare you well for a career in the expanding health field. Computer-aided drafting and design, computer integrated manufacturing technology, and the newest computer hardware and software will provide opportunities to enter high-tech, high-wage careers.

If your goal is to transfer and complete your baccalaureate degree, Forsyth Tech is the right place to take your first two years of liberal arts courses that will allow you to transfer, as a junior, to state colleges and universities and many private colleges.

We certainly hope you will choose to enroll at Forsyth Technical Community College. We believe you will have an enjoyable, challenging, and rewarding experience. I urge you to take full advantage of the best educational bargain in Winston-Salem and North Carolina. Our open-door policy and our helpful admissions counselors will assure you a smooth entry into the college.

Please feel free to contact any member of the college community to answer questions and provide you with assistance. I look forward to seeing you on our campus!

Desna L. Wallin

Desna L. Wallin, Ed.D.
President

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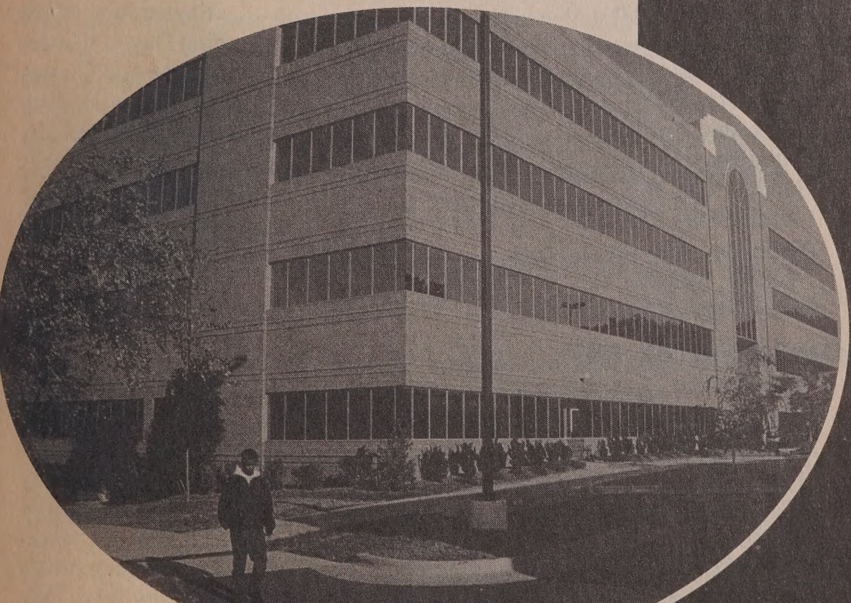
General Information



Academic Calendar

FALL QUARTER, 1996

Monday, September 2	Labor Day Holiday
Tuesday, September 3	Faculty/Staff Orientation
Wednesday and Thursday, September 4 and 5	Registration (FWD)
Friday, September 6	Faculty Work Days
Monday, September 9	First Day of Classes
Tuesday, September 10	Last Day to Add Classes
Wednesday, October 16	Last Day to Drop Without Penalty
Friday, November 22	Last Day of Classes
Monday, November 25	Grade Posting (FWD)
Tuesday and Wednesday, November 26 and 27	Faculty Work Day
Thursdayand Friday, November 28 and 29	Thanksgiving Holidays

WINTER QUARTER, 1996

Monday, December 2	Registration (FWD)
Tuesday, December 3	First Day of Classes
Wednesday, December 4	Last Day to Add Classes
Monday, December 23	Faculty Work Day
Tuesday, December 24 through Wednesday, January 1	Christmas/New Year Holidays
Friday, January 17	Faculty Work Day
Monday, January 20	Martin Luther King's Birthday Holiday
Thursday, January 23	Last Day to Drop Without Penalty
Monday, March 3	Last Day of Classes
Tuesday, March 4	Grade Posting (FWD)

SPRING QUARTER, 1997

Wednesday, March 5	Faculty Work Day
Thursday , March 6	Registration (FWD)
Friday, March 7	First Day of Classes
Tuesday, March 11	Last Day to Add Classes
Friday, March 28	Easter Holiday
Wednesday, April 16	Last Day to Drop Without Penalty
Friday, May 23	Last Day of Classes
Monday, May 26	Memorial Day Holiday
Tuesday, May 27	Grade Posting (FWD)
Wednesday, May 28	Faculty Work Day
Thursday, May 29	Graduation (FWD)
Friday, May 29	Faculty Work Days

SUMMER QUARTER, 1997

Monday, June 2	Registration (FWD)
Tuesday, June 3	First Day of Classes
Wednesday, June 4	Last Day to Add Classes
Friday, July 4	Independence Day Holiday
Tuesday, July 8	Last Day to Drop Without Penalty
Tuesday, August 12	Last Day of Classes
Wednesday, August13	Grade Posting (FWD)
Thursday, August 14	Faculty Work Day
Friday, August 15	Graduation (FWD)
Monday, August 18 -Friday, August 29	Annual Leave (Faculty & Staff)

Information subject to change without notice.

FORSYTH
TECHNICAL COMMUNITY COLLEGE

HISTORY

FTCC traces its beginning to early adult and high school vocational courses which were available in Winston-Salem. In 1958 a Chamber of Commerce study recommended that an Industrial Education Center be built to provide the trade and technical training needed by local industry. A bond issue provided the money to start construction of two buildings late in 1959 and the first adult classes were begun in October of 1960. In 1963 a third building was constructed and new technical programs were added. That same year, the North Carolina Legislature passed the Community College Act, creating a statewide system of community colleges, technical institutes, and industrial education centers. In January 1964 the name of the school was changed to Forsyth Technical Institute. The operation of the school was transferred from Winston-Salem/Forsyth County Schools to a local board of trustees to govern the Institute following policies established by the State Board of Education and the State Department of Community Colleges.

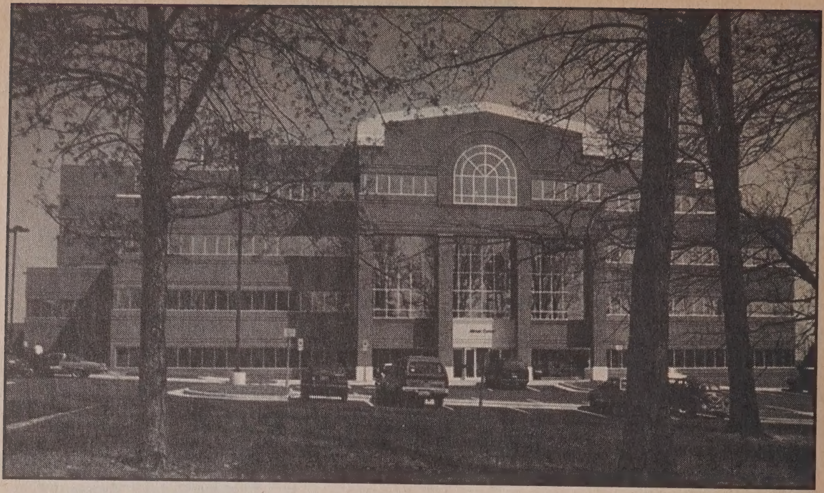
In 1984 a bond referendum provided funds for the acquisition of Dalton Junior High School, which became the Institute's West Campus, and for the construction of a high technology building, Hauser Hall. In July 1985 Forsyth Technical Institute became Forsyth Technical College. In December 1987 Forsyth Technical College became Forsyth Technical Community College. Changing to a community college made it possible to offer a College Transfer curriculum. The College Transfer curriculum began in the fall of 1989.

In 1991 Bob H. Greene Hall was completed and serves as a classroom facility for general education and continuing education courses. It also houses the ADN and PN curriculums.

In 1992 the Allman Center was completed and serves as a classroom facility as well as housing administrative and student services functions.

Today the college offers 28 associate degree curriculums, 13 vocational diploma curriculums, and 12 certificate curriculums. The academic programs of the college are organized into five divisions: Arts and Sciences, Business Technologies, Engineering Technologies, Health Technologies and Adult Continuing Education. The physical plant includes 17 buildings with replacement value of $37 million. Over 5,100 curriculum students are enrolled and more than 10,000 students enroll each quarter in continuing education classes.

FTCC is an integral part of the growth and success of Forsyth and surrounding counties.



MISSION

FTCC is a comprehensive community college offering lifelong learning and educational opportunities to improve the quality of life for all citizens.

As an open door college FTCC provides
Adults opportunities for
Development,
Education, workforce
Preparedness, and
Training for a useful and productive life.

PURPOSE

FTCC is dedicated to providing these opportunities through education and training in college transfer, vocational/technical, and continuing education areas.

The purpose of FTCC is to provide:

- effective teaching and academic support services for adults.
- opportunities for adults who need to master basic education skills.
- vocational education and training for adults who are preparing to enter skilled trades.
- technical education and training for adults wishing to enter occupations in business, industry, and health services.
- technical, vocational, and self-improvement courses for adults.
- education for adults who wish to further their schooling at four-year institutions.
- employee training and retraining for business and industry in response to changing economic conditions.

EQUAL OPPORTUNITY/ AFFIRMATIVE ACTION

DISCRIMINATION

FTCC is an equal opportunity institution, in compliance and agreement with the provisions set forth in Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. No person shall be discriminated against on the basis of race, sex, religion, age, sexual orientation/preference, national origin, or disability, if otherwise qualified.

Applicants, employees, and students of FTCC may lodge grievances involving alleged violations of their rights under these provisions with the Equal Opportunity/Affirmative Action Officer at (919) 343-4261 or the Assistant Secretary, Office for Civil Rights, 330 C. Street S.W., Washington, D.C. 20202. Inquiries may be directed to the equal opportunity affirmative action officer for employees and the dean of Student Development Services for students at FTCC.

AUXILIARY AIDS FOR STUDENTS WITH DISABILITIES

No student with impaired sensory, manual, or speaking skills will be denied the benefits of, excluded from participation in, or otherwise subjected to discrimination under any education program or activity operated by FTCC because of the absence of educational auxiliary aids. Auxiliary aids include interpreters or other effective methods of making orally-delivered materials available to students with hearing impairments; taped texts; readers for students with visual impairments; and other similar services and actions. FTCC will make every effort to provide auxiliary aids to students who require such assistance; however, FTCC is not required to and will not provide attendants, individually prescribed devices, readers for personal use or study, or other devices or services of a personal nature.

The student with a disability has the responsibility to notify the Special Services/ Testing/ADA coordinator of the need for educational auxiliary aids such as interpreters. The disabled student is required to notify the coordinator as soon as the student begins to seek application or registration since ample time is necessary for locating appropriate aids. The Special Services/Testing/ADA coordinator can be contacted at 723-0371, Ext. 383. Deaf students may call the coordinator by TTY at 723-3411.

LOCAL ADVISORY COMMITTEES

Each curriculum has its own advisory committee. The committees are composed of representatives of local businesses, industries, education and community organizations.

The advisory committees provide the necessary contact between FTCC and the community in an effort to maintain current and relevant programs of instruction to meet the needs of the community.

LOCATION AND FACILITIES

The main campus is located at 2100 Silas Creek Parkway in the southwest section of Winston-Salem. The West Campus is located at 1300 Bolton Street at the intersection of Bolton Street and Silas Creek Parkway. The health technology curriculums are housed in the Allied Health Building at North Carolina Baptist Hospital and in the Bob H. Greene Hall on the main campus. All campuses are easily accessible from US Highway 52, North Carolina Highway 150, and Interstate Highway 40.

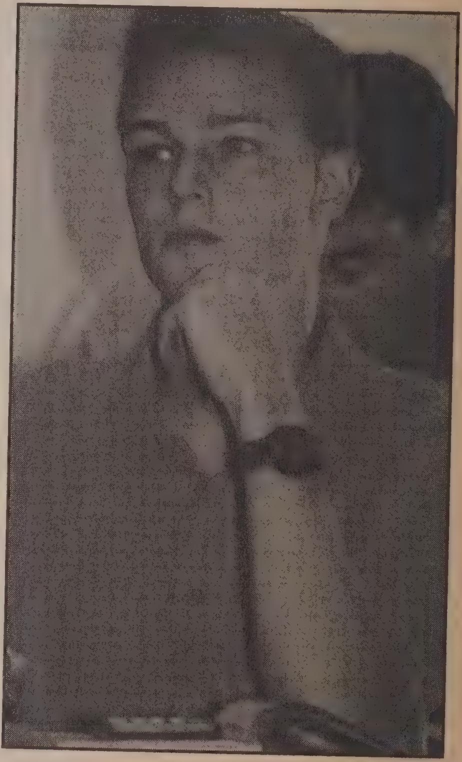
Learning Centers are available on main campus and West Campus.

HOURS OF INSTRUCTION

Classes are scheduled between the hours of 7 a.m. and 11 p.m., Monday through Friday. Some courses are offered on Saturdays.

Students in health technology curriculums (particularly nursing curriculums) can expect clinical practice to be scheduled during any part of the 24-hour day, seven days a week.

ACCREDITATION



FTCC is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the associate degree.

The Associate Degree Nursing curriculum and Practical Nursing curriculum are accredited by the North Carolina State Board of Nursing. Respiratory Care Technology and Medical Sonography are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Radiologic Technology and Radiation Therapy Technology are accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The Nuclear Medicine Technology curriculum is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT).

Electronics Engineering Technology, Manufacturing Engineering Technology, and Drafting and Design Engineering Technology are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

FTCC is a member in good standing of the American Association of Community Colleges.

PROGRAMS OF STUDY

Some programs of study may be available both day and evening. For specific information, contact the Admissions Office.

ASSOCIATE IN APPLIED SCIENCE DEGREE

Accounting
Administrative Office Technology
Architectural Technology
Associate Degree Nursing
Automation/Robotics Technology
Banking and Finance
Business Administration
Business Computer Programming
Computer Engineering Technology
Criminal Justice - Correction
Criminal Justice - Law Enforcement
Criminal Justice - Protective Services
Drafting and Design Engineering Technology
Early Childhood Associate
Electronics Engineering Technology
Film & Video Production Technology
Horticulture Technology
Manufacturing Engineering Technology
Marketing and Retailing
Medical Assisting
Medical Sonography
Microcomputer Systems Technology
Nuclear Medicine Technology
Paralegal Technology
Physical Therapy Assistant
Radiation Therapy Technology
Radiologic Technology
Respiratory Care Technology

COLLEGE TRANSFER

Associate in Arts
Associate in Science

VOCATIONAL DIPLOMA

Air Conditioning, Heating, and Refrigeration
Automotive Body Repair
Automotive Mechanics
Diesel Vehicle Maintenance
Electrical Installation
Electronic Servicing
Graphic Arts - Printing
Machinist
Plumbing and Pipefitting
Practical Nursing
Residential Carpentry
Welding

TECHNICAL SPECIALTY DIPLOMA

Vascular/Cardiovascular Interventional Technology

CERTIFICATE

Clerical Processing
Computerized Tomography
Customer Service
Diesel Vehicle Maintenance
Funeral Director
General Technology
Magnetic Resonance Imaging
Manufacturing Engineering Technology
Microcomputing Systems Technology
Real Estate Technical Specialty
Real Estate Appraisal
Welding

ADULT CONTINUING EDUCATION PROGRAMS

Academic
Adult Basic Skills
Adult High School Diploma
Community Service
Compensatory Education
General Educational Development (GED)
Health-Related Training
Literacy Education
Management Development Training
New and Expanding Industry Training
Occupational Extension
Small Business Education Center
Special Seminars and Workshops
Vocational/Technical Extension

FORSYTH
TECHNICAL COMMUNITY COLLEGE

ADMISSIONS

ADMISSION REQUIREMENTS

FTCC is an Equal Opportunity Institution and operates under an open door admissions policy. Admission to FTCC does not, however, imply immediate admission to the curriculum desired by the applicant. Before a prospective student is admitted to a specific curriculum, placement tests will be scheduled and counseling interviews may be arranged. This process helps the students to evaluate their potential for success in their chosen field. When an evaluation of test scores and other evidence indicates a lack of readiness to enter a specific curriculum, the applicants may be approved to take remedial coursework or may be encouraged to reexamine their educational and occupational goals.

FTCC will accept credit from other accredited technical institutes, community colleges, colleges and universities. For specific information refer to "Transfer Students"(p. 29).

Admission to Associate Degree Curriculums

High school graduation, or the equivalent as recognized by the state of North Carolina, is required of all applicants for degree curriculums. The high school equivalency certificate or the state adult high school diploma is acceptable in lieu of a regular high school diploma.

Applicants for the associate degree curriculums who are not high school graduates may arrange to complete high school in the Continuing Education Adult High School program or take the high school equivalency examination (GED).

Applicants for admission to the Drafting and Design Engineering Technology and Manufacturing Engineering Technology curriculums must present one unit of algebra and one unit of geometry. Business Computer Programming, Architectural Technology, Electronics Engineering Technology, and Automation/Robotics Technology applicants must present one unit of algebra. Applicants for admission to the Computer Engineering Technology curriculum must present three units of mathematics beginning with Algebra I and one half-unit of typing. Applicants for admission to associate degree health curriculums must present one unit in algebra, one unit in biology, and one unit in chemistry. Applicants to the Associate Degree Nursing curriculum must have completed the unit of chemistry within a five-year period. High school physics is recommended for the engineering technology and health technology curriculums. Applicants for admission to College Transfer Associate in Arts and Associate in Science curriculums must present two units of algebra and a unit of high school chemistry.

Applicants for associate degree curriculums should submit scores on either the Scholastic Aptitude Test (SAT) or the Computerized Placement Test (CPT). Information concerning the SAT may be obtained from local high school counselors or the Career Guidance Center in Student Development Services. Information on and registration for the CPT are available at the Information Desk in the Allman Center lobby.

Applicants for curriculums may be subject to approval by the FTCC Admissions Review Committee for that curriculum (particularly in the health technology curriculums). The members of the Admissions Review Committee come from instructional and administrative staff of the curriculums and the Student

Development Services staff. The purpose of the committee is to evaluate all available data concerning each applicant. A majority of the committee must concur that applicants meet minimum criteria before they are admitted. Applicants for those curriculums in which the enrollment quota is filled before all applications are received will be informed that they may reapply for the next enrollment cycle. Some curriculums have more than a once-a-year enrollment cycle.

It should be noted that certain health technology curriculums have to admit applicants under state statutes of the licensure agencies. The North Carolina Board of Nursing has state statutes that identify reasons for prohibiting licensure for Associate Degree Nursing and Practical Nursing graduates. The reasons are presented during the admission process.

All students in Nuclear Medicine Technology, Radiologic Technology, and Radiation Therapy Technology come under the radiation exposure regulations of the state and federal governments (Radiation Safety Hazard Regulation). Any student who receives exposure in excess of permissible limits as defined by the regulations will be advised of the possible harmful effects and may be dropped from the curriculum. The regulations pertaining to students below the age of 18 are more stringent than those for the older student.

Admission to Diploma Curriculums

Applicants for one-year diploma curriculums must be high school graduates or meet North Carolina equivalency certificate (GED) standards. For non-high school graduates with special needs, however, exceptions may be made under certain circumstances in every curriculum except Practical Nursing.

Applicants who are not high school graduates may arrange to complete high school in the Continuing Education Adult High School program or take the high school equivalency examinations (GED) offered at the West Campus. Applicants may be admitted into some curriculums on the basis of high school records; however, scores on the SAT or the CPT may be required. Questions concerning the need for testing should be directed to the Admissions Office.

Because of the specialized nature of some of the curriculums, one unit of high school algebra is recommended for Air Conditioning, Heating, and Refrigeration; Electrical Installation and Maintenance; Electronic Servicing and Machinist. High school geometry is also recommended for Machinist. Biology is recommended before entering Practical Nursing. Algebra I and chemistry are required for Practical Nursing.

Admission to the Practical Nursing curriculum may also be subject to approval by the Health Admissions Review Committee.

Admission to Adult Continuing Education and Extension Programs

Persons enrolling must be 18 years old or older. Further information concerning admission and registration procedures may be obtained from the office of the dean of Adult Continuing Education.

SPECIAL INFORMATION FOR FOREIGN STUDENTS

Foreign Students with visas are considered for admission through the normal admissions procedures and must meet residency requirements for in-state tuition. Students seeking admission with the use of an I-20 are directed to discuss their admission with the admissions staff.

Applicants graduating from high schools outside the United States must produce a translated transcript and must demonstrate high school proficiency through satisfactory scores on the GED and/or the CPT.

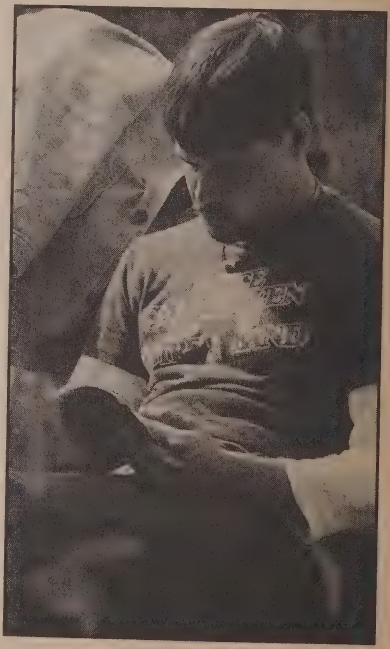
RESIDENCY FOR TUITION PURPOSES

Under North Carolina law, each person must be classified as a resident or nonresident for tuition purposes. North Carolina law (G.S. 116-143.1) requires that to qualify as an in-state student for tuition purposes, a person must have established legal residence (domicile) in North Carolina and maintained that legal residence for at least 12 months immediately prior to classification as a North Carolina resident. All applicants for admission are required to make a statement as to their length of residence in the state.

To be eligible for classification as a resident for tuition purposes, applicants must establish that their position in the state currently is, and during the requisite 12-month qualifying period was, for purposes of maintaining a bona fide domicile rather than of maintaining a mere temporary residence or abode incident to enrollment in an institution of higher education. The burden of establishing facts which justify classification of a student as a resident entitled to in-state tuition rates is on the applicant.

Residency for tuition purposes is initially determined by an admissions counselor during the approval of each applicant for admission to FTCC. The residency determination is stated to the students in their admission approval letter. A student who is deemed to be out of state for tuition purposes has the right to complete the Residence and Tuition Status Application for further consideration and appeal. This form, with a written request for appeal, is submitted to the director of Admissions who reviews the initial determination and renders a decision within two weeks based on the additional information. The applicant may be requested to provide additional information before the decision is made. Students still dissatisfied with the residency decision made at this level may appeal in writing to the dean of Student Development Services. The dean of Student Development Services will review all information submitted by the applicant and may ask for additional information for clarity. The student's entire file will be reviewed. A decision will be made within two weeks and the student will be informed in writing.

Questions regarding residency status should be directed to the Admissions Office.



ADMISSIONS PROCEDURES

An applicant for admission to any degree, diploma or certificate curriculum should:

1. Obtain an application from the Admissions Office or from a high school counselor.
2. Submit the properly completed application to the Admissions Office.
3. Arrange to take the Computerized Placement Test (CPT) through the Admissions Office. Scholastic Aptitude Test (SAT) scores may be substituted for the CPT. American College Test (ACT) scores may also be substituted for programs other than health.
4. Request that a transcript of all high school and post-high school academic work be sent directly to the Admissions Office.
5. Submit recommendations if requested.
6. Report for an interview, if requested, on the date scheduled by the Admissions Office. At this interview, test scores and previous academic records will be evaluated and the applicant will be advised as to eligibility for admission to the desired curriculum. If an interview is not necessary, students will be notified of their status in writing.
7. Submit a properly completed health appraisal form when requested.
8. Participate in an orientation program prior to entry into a curriculum.

Students who are currently enrolled and wish to be considered for another curriculum must update their application in the Admissions Office.

TUITION AND FEES

GENERAL TUITION AND FEES

FTCC receives funds from local, state, and federal sources. Tuition charges are set by the State Board of Community Colleges and are subject to change without notice.

In-State Tuition: .... $13.25 per quarter hour
Out-of-State Tuition: .... $107.50 per quarter hour

Students enrolled for 12 credit hours are considered full-time.
Students will be charged per credit hour up to 14 credit hours.

Example:	**Hours taken**	**In-State Tuition**	**Out-of-State Tuition**
	12	$159.00	$1,290.00
	13	$172.25	$1,397.50
	14	$185.50	$1,505.00

No tuition is charged for noncredit classes in the Adult Continuing Education Division. However, a registration fee may be charged. No tuition or fee is charged for Adult Basic Education courses. Normal tuition rates will apply if courses are taken in the Learning Center. No tuition is charged for individuals aged 65 and over except self support continuing education courses. Supply fees are set to meet instructional needs in certain types of courses. Some curriculums require a pre-admission physical examination which involves additional cost to the student.

POLICY ON RESTRICTIONS ON CLASS ADMISSION

No person may attend classes unless the registration procedure has been completed, all tuition and fees have been paid and all debts to the college settled.

STUDENT ACTIVITY FEE

It is the policy of FTCC that a $5.00 student activity fee be charged. The activity fee for curriculum students will be collected during each quarter's registration.

Students become members of FTCC's Student Government Association when they pay the student activity fee. The term "activity fee" may be misleading because the fee is used for more than just providing activities. Below is a list of expenses covered by the student activity fee.

1. **Graduation expenses** are partially covered. It costs over $25.00 per student to hold a graduation ceremony. Currently, students pay a graduation fee of $10.00 for each diploma received.
2. ***Technically Speaking*** is a student newspaper published quarterly.
3. **Student activities and entertainment** such as cookouts, Christmas dances, and end-of-the-year Spring Flings are free to students.
4. **Athletic teams** participate in men's basketball, coed volleyball, in league play with other community colleges such as basketball and softball. Equipment and registration fees are paid for out of the student activity fee budget.
5. **All Student Government Association expenses** are paid for out of student activity fee funds. Expenses include a portion of the student activities facilitator's salary, supplies and materials for use in the SGA Office, and all SGA printing expenses.

6. **Attendance at SGA conferences** is a major expense of the SGA. FTCC is a member of the North Carolina Comprehensive Community College (N4C) Student Government Association. The N4CSGA offers three conferences each year. These conferences offer workshops and seminars to better prepare students to lead the SGAs on their campuses.

For more details about the budget or to become involved in any of the activities listed above, contact the student activities facilitator in Snyder Hall.

BOOKS AND SUPPLIES

Textbooks and supplies are not furnished by FTCC but are the responsibility of the student and may be purchased at the bookstore. The cost of books and supplies varies from curriculum to curriculum and from quarter to quarter.

UNIFORMS

Uniforms and other special wearing apparel will be paid for by the student. The initial cost of uniforms and special equipment in the various health curriculums is estimated at $300.00. Students should inquire for details in the Admissions Office.

LAB FEES

Some selected courses charge a lab fee for supplies, software and equipment usage. These fees range from $5.00 to $20.00.

OTHER FEES

No laboratory breakage or property damage fees will be charged to students. However, in case of breakage or damage due to gross negligence or maliciousness, a student will be expected to reimburse FTCC. Academic credit and official transcripts may be withheld until proper payment is made.

GRADUATION FEE

A $10.00 graduation fee will be charged to the student for each degree, diploma, and/or certificate that the student applies for. A $10.00 nonrefundable graduation fee will also be charged to the Adult High School graduates.

TRANSCRIPT FEE

A $2.00 fee is assessed for each copy of the transcript requested, whether offical or unofficial.

PARKING

Visitors are welcome on the campus of FTCC. Designated visitor parking areas will be indicated by campus signs. Any visitor receiving a ticket should return it to the person or office visited.

Students planning to park on campus are required to purchase a $5.00 parking decal at the time of registration. Specific rules governing parking will be issued upon vehicle registration and may be found in the current issue of the *Student Handbook.*

LIABILITY INSURANCE FOR HEALTH STUDENTS

All health students must purchase annual liability insurance, which may vary according to curriculum or insurance carrier, before engaging in lab or clinical practice. Health students who enter or re-enter at a quarter other than fall quarter will pay a prorated cost for that year.

TUITION REFUNDS

Tuition and supply fees can be considered for a refund. Student activity fees will be refunded only when classes are cancelled. Students must complete a Request for Tuition Refund form in the Records Office when they drop class(es). All requests are reviewed after the 15th class day. Notification will be mailed to the address provided on the form upon completion of processing.

A 100 percent refund shall be made if the student officially withdraws prior to the first day of class(es) of the academic quarter as noted in the college calendar. Also, a student is eligible for a 100 percent refund if the class in which the student is officially registered fails to "make" due to insufficient enrollment and is cancelled by the college.

After registration day(s) and beginning with the first day of classes, a 75 percent refund shall be made if the student officially withdraws from the class(es) prior to or on the official 20 percent point of the quarter.

In the event a student, having paid the required tuition for a quarter, dies during that quarter (prior to or on the last day of examinations), all tuition and fees for that quarter may be refunded to the estate of the deceased.

Guidelines

1. Students passing proficiency examinations for courses they have registered and paid for are not eligible for a tuition refund.
2. Refunds of five dollars or less will not be made except for classes cancelled by FTCC.
3. Fees other than tuition, supply and lab fees cannot be refunded.
4. Tuition is not transferrable to other individuals.
5. Late tuition refund requests will not be considered.
6. Tuition refunds for Adult Continuing Education classes are handled at the West Campus on Bolton Street.
7. Tuition can not be held from one quarter to a future quarter.

STUDENT FINANCIAL RESPONSIBILITY

The Business Office recommends the use of cash, certified checks, cashier's checks, Mastercard or Visa credit cards for payment of tuition, fees, and charges. Personal checks will be accepted only with a numbered ID that has a picture of the student (usually a valid driver's license). Third-party, out-of-country, out-of-state, and business checks will not be accepted.

Personal checks may be written to pay for tuition and fees. However, if the check is returned for any reason, there will be a service charge of $20.00 for each check written. Any student who does not have money for tuition and fees or does not have on file in the Business Office a written authorization from a sponsoring agency will not be allowed to register.

ACADEMICS

ORIENTATION AND REGISTRATION FOR NEW STUDENTS

It is strongly recommended that all new curriculum students participate in an orientation and registration session conducted by the counseling staff and faculty. The purpose of this session is to register the students and to acquaint them with personnel, faculty, and student organizations. The regulations, policies, and privileges of FTCC as set forth in the *General Catalog* and *Student Handbook* are discussed and interpreted. Specifics are presented on departmental rules and schedules for individual curriculums that entering students are required to be familiar with while enrolled.

REGISTRATION FOR CURRENTLY ENROLLED STUDENTS

The registration and prepayment dates for currently enrolled students are posted during the latter part of each quarter. All currently enrolled students are required to meet with their advisor to determine a schedule of courses for the upcoming quarter. Any questions arising during this registration period concerning transfer credit for a course(s) should be directed to the appropriate admissions counselor. Tuition and fees must be paid on designated prepayment or registration days or students will have their registration voided.

WALK-IN REGISTRATION

Walk-In registration is designed especially for special credit applicants who are not enrolled in a curriculum but wish to enroll in a few courses. Students wishing to participate in Walk-In registration to register should come to the Admissions Office on the scheduled day of the Walk-In registration, and pay tuition/fees at one time. It is recommended that they submit their applications at least one week before the scheduled Walk-In registration date as published in the college calendar. This will eliminate having to wait for their application to be processed.

REGISTRATION DAY

On registration day, as published in the college calendar, all approved students may see their advisor and register for classes for that quarter. Advisors are on campus to assist students with the registration process and the cashier's office is open to accept tuition/fees. Students may register for or drop and add classes on this day.

DROP/ADD AND SCHEDULE ADJUSTMENT

A student may drop and add classes during the drop/add period. Schedule adjustment may be allowed if:

1. a class is not cancelled or closed;
2. students have the consent of their advisor and have met admission requirements and prerequisites.

COURSE NUMBERING SYSTEM

Courses are numbered in accordance with the system approved by the North Carolina Community College System. Each course is designated by a three-letter prefix indicating the general subject area. A number indicating a specific course within an area follows the letter prefix according to the following rules:

1.	Pretechnical courses or noncredit courses	0001-0099
2.	College Transfer and Technical courses	0100-0299
3.	Vocational courses	1000-1099
4.	Continuing Education courses beyond high school	2000-3099

GRADING SYSTEM

The following grading system is generally used by FTCC:

Number Grade	Letter Equivalent	Description	Quality Points per Grade Hour
94-100	A	Excellent	4
86-93	B	Good	3
78-85	C	Fair	2
70-77	D	Passing	1
Below 70	F	Failing	0
Withdrawal	W	*The letter equivalent system is used for recording and reporting grades.*	
Withdrawal Passing	WP		
Withdrawal Failing	WF		
Incomplete	I		
Audit	Y		
Course Transferred	TR		
Credit Granted or Passed Proficiency	CR		

W - Withdrawal. A Withdrawal is the grade given to a student who officially withdraws from a course through the 50% point of the quarter or the 50% point of a class when the class does not begin in the first five days of the quarter.

WP/WF - Withdrawal Passing/Failing. A Withdrawal Passing/Failing is the grade given to a student who officially withdraws from a class at any time after the 50% point of the quarter.

A student may officially withdraw after the 50% point only after talking with the instructor of the class. If the student officially withdraws or if the student is dropped by the instructor, the instructor will determine if a grade of WP or WF is appropriate.

I - Incomplete. The grade of Incomplete is given only if a student has a valid reason for failure to complete the work on schedule. Illness, absence on company business, or circumstances beyond the student's control are considered valid reasons for noncompletion of work. The student must have advised the instructor of the circumstance before the end of the quarter and have been granted an Incomplete grade. The instructor must have specified the work to be made up in order to remove the Incomplete grade and a date within the following quarter by which the work must be completed. If the conditions necessary to remove the Incomplete grade will require additional hours of instruction, the student must reregister for the course. If, on the other hand, the student needs only to complete work without instructional supervision, this work must be completed no later than the following quarter, or the course must be repeated.

Any student who receives an Incomplete grade on a course that is a prerequisite for another course must make up the incomplete work by the end of the drop/add period if the student is registered for the next succeeding course. Should the student fail to remove the Incomplete grade by the end of the drop/add period, the student must drop the course which is dependent on the prerequisite.

If the Incomplete grade is not removed by the end of the quarter immediately following the quarter it was granted, it will remain permanently recorded.

Y - Audit. Students auditing courses are not required to take examinations or hand in written work but may do so if they wish. No grade or credit toward a diploma is given. An audit may not be changed to credit, nor credit changed to audit after the last day of the drop/add period. Normal attendance policies will apply. Students withdrawing during the quarter will be given the grade of W. The Audit Request form is available in the Records Office or from the appropriate division dean. It must be submitted to the Records Office for processing before the end of the drop/add period.

HOW TO WITHDRAW OFFICIALLY

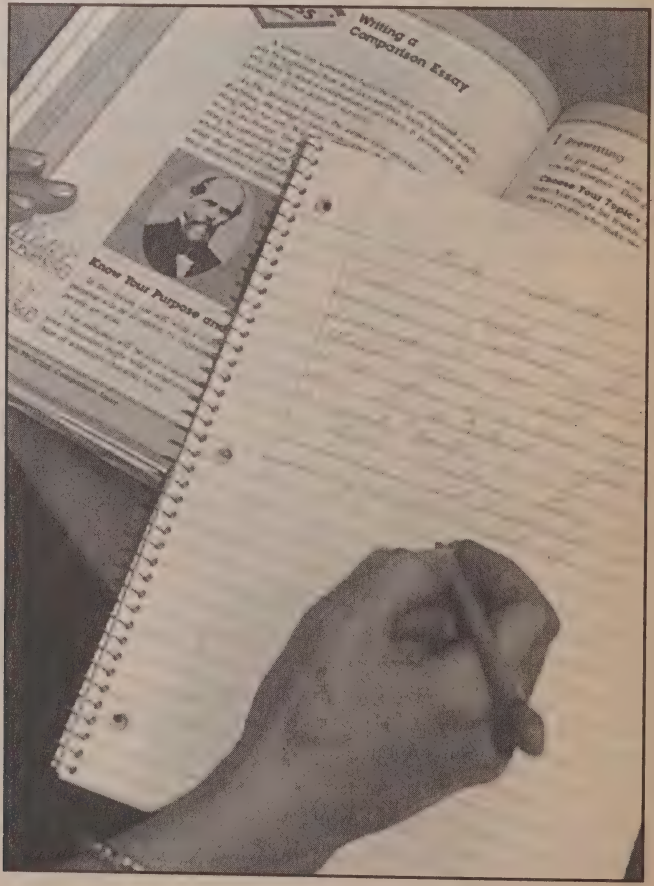
Every student who is considering withdrawing from a class or from school should contact their instructor or the Records Office to discuss the decision to withdraw. When the student initiates a drop, the date the student completes the Drop Form is considered the official withdrawal date by the Records Office. When the instructor initiates a drop, the date the instructor records on the Drop Form is the official withdrawal date.

Withdrawal from a Class - It is the student's responsibility to notify the instructor or Records Office in person of the decision to withdraw and to complete a Drop Form.

Total Withdrawal from School - A student who must withdraw from school before graduation, either permanently or temporarily, should withdraw officially. Students must notify their instructors or go to the Counseling Center in person and complete a Drop Form and the End-Of-Quarter Withdrawal Notice. This information is necessary to ensure that the student's status at the time of withdrawal is clearly identified in order to expedite reentry, transfer of credit to another institution or to provide potential employers with accurate education information. Veterans and financial aid recipients must notify Student Financial Services. When students fail to notify the Records Office or instructor, they may receive a failing grade. As stated in the attendance policy, *no passing grade* will be issued for a course(s) if, for whatever reason, a student has been absent *25% of the total* officially scheduled class time. Under these circumstances, it is the responsibility of the instructor to initiate the Drop Form as soon as possible and submit it to the Records Office.

PREREQUISITES FOR CURRICULUM COURSES

Many curriculum courses have prerequisites to make sure that courses are taken in the proper sequence. If the occasion arises in which a prerequisite should be waived, both the appropriate department chairperson and dean must approve the waiver in writing. If a course affects more than one division, written approval may be necessary from more than one department chairperson and dean before the student registers for that course.



APPEALS OF COURSE GRADE

A student may appeal a course grade by submitting a written request to the appropriate division dean within 24 hours after receiving the grade. The dean will convene the division Academic Appeals Committee, which will hear the appeals and recommend a course of action. The dean will make the final decision on the matter and send written notification to the student, the instructor, and the student's faculty advisor.

ACADEMIC STANDING/PROBATION

To be in good academic standing, a student must have earned a cumulative grade point average of 2.0 by the end of the first quarter at FTCC. A cumulative grade point average of 2.0 must be maintained thereafter to remain in good standing.

A student who does not maintain the required cumulative 2.0 GPA will be placed on academic probation for the following quarter. Students who do not earn the required GPA in the next quarter will have their academic records reviewed by the department Academic Review Committee. This committee meets at the end of each quarter. It may reduce the number of credit hours the student will be allowed to carry, require the student to repeat courses in which a low grade was earned, or elect to remove the student from the curriculum.

The student will be notified in writing of the committee's decision, and copies of the notice will be sent to the Records Office, the division dean, and the student's faculty advisor. Students will be removed from probation automatically when the cumulative GPA reaches 2.0.

All students enrolled at FTCC are expected to be fully aware of their academic status at all times and to be responsible for fulfilling the requirements necessary to remain in school and in good academic standing. Instructors, faculty advisors, and counselors are available for assistance, but it is the responsibility of the student to seek help. *Final responsibility for satisfactory academic progress is the obligation of the student.*

APPEAL OF ACADEMIC REVIEW COMMITTEE

A student may appeal the decision of the department Academic Review Committee by submitting a written request to the appropriate division dean within 24 hours after formal notification of the committee's decision. The dean will convene the division Academic Appeals Committee, which will hear the appeal and make a recommendation. The dean will make the final decision on the matter and send written notification to the student, the department chair, and the student's faculty advisor.

COURSE REPEAT RULE

The last grade earned on a repeat course will be the grade computed for GPA. Withdrawal grades of W or WP will not be considered as repeat grades. A grade of WF will be considered as a repeat grade.

If students fail any course in their curriculum, they must repeat the course until a passing grade is received; otherwise, they cannot receive a degree, diploma or certificate. Students are responsible for scheduling make-up courses required for graduation. Students may repeat a course at another college to meet graduation requirements. However, the repeat will not affect their GPA at FTCC. The last grade at FTCC will remain on their transcript and will compute in their GPA.

If students fail one of the courses in the major subject area, they may be referred to the Counseling Center for counseling. The appropriate dean will make the final decision on students' permission to repeat a class after several attempts with a failing grade.

GRADE REPORTS AND TRANSCRIPTS

Student grade reports are mailed to students' permanent addresses after the end of each quarter.

Transcripts of all course work attempted at FTCC are maintained in the Records Office. Requests for copies of a student's transcript should be made in writing to the Records Office. Transcripts will not be issued without the written authorization of the student. All transcripts will reflect the student's complete academic record. Partial or incomplete transcripts will not be issued. Official transcripts are issued to employers, educational institutions, etc. Transcripts issued to students are unofficial and indicate that they were issued to the student. Official transcripts may be issued to students in a sealed envelop. However, the transcript will have a notation that this was done. The receiving party will be responsible for determining if they will accept it as an official transcript or not.

A fee is assessed for each copy of the transcript requested, whether official or unofficial. Transcripts are not issued if a student's file has been sealed or if tuition, fees, and other obligations due FTCC have not been satisfied.

Transcripts from other high schools and colleges will not be released to the student or a third party.

COURSE SUBSTITUTION

Course substitution may be granted when deemed necessary for graduation or as a necessary accommodation to successfully complete a degree. The appropriate dean's permission is required.

ADVISOR/ADVISEE

FTCC has an advisor/advisee program which is designed to provide a more personal atmosphere for the student and to increase communication between students and faculty. Each student is assigned a curriculum advisor. Through periodic conferences between the student and advisor, it is hoped that the student will be better able to choose an academic program from quarter to quarter and that potential problems will be avoided.

Each advisor will post regular office hours so that the student can arrange conferences to discuss or explore any problem or condition. The advisor will assist the student during registration. Students are not allowed to register without proper advising.

Each student is assured that all discussions are confidential. When necessary, the student may be referred to the Counseling Center.

CLASS ATTENDANCE

Students are expected to attend all class, laboratory, shop, practicum, and clinical experience sessions. Students have full responsibility for accounting to their instructors for any absence and should report to their instructors as soon as possible to determine if and when work may be made up.

Students are expected to report for class, laboratory, shop, practicum, and clinical experience on time. Habitual tardiness may, at the discretion of the instructor, be considered in computing attendance.

Students must satisfy the instructor that they should be permitted to remain in a course and attend classes after incurring absences in excess of the following:

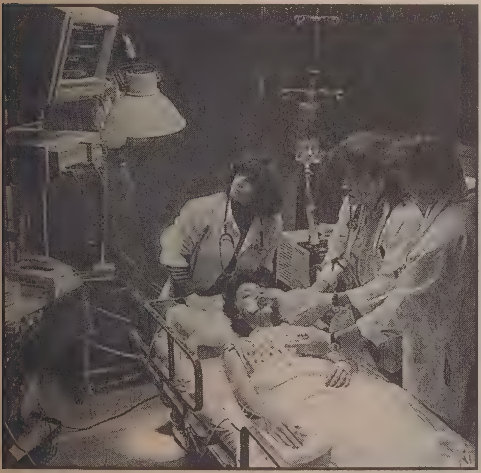
1. three (3) hours of class;
2. two (2) practicum (shop, laboratory, or clinical experience) sessions which meet for two (2) or more hours;
3. two (2) hours of class and one (1) practicum (shop, laboratory, or clinical experience) session which meets for two (2) or more hours.

When students are absent from a class and a practicum (shop, laboratory, clinical experience) session which meet consecutively, each session missed will be counted as an absence.

Students will be informed in writing no later than the second class meeting when a course requires any special attendance rules different from those listed above. These special attendance rules must be on file in the office of the appropriate dean.

Class attendance is calculated from the first officially scheduled class meeting, which includes the drop/add period, through the last scheduled meeting.

No passing grade will be issued for a course if, for whatever reason, a student has been absent 25 percent of the total possible class time per course per quarter.



CLINICAL EXPERIENCE IN HEALTH CURRICULUMS

1. Clinical hours in any of the health curriculums may be scheduled during any part of the 24-hour day, seven days a week.
2. Students will be informed in writing no later than the second class meeting when a clinical course requires any special attendance requirements.
3. In order to pass clinical courses, students must pass all critical requirements for the course.
4. Required uniforms must fit neatly in order for the student to meet the dress code of both FTCC and the clinical facilities.
5. There are certain areas (operating room, obstetrics, isolation rooms) in the hospitals that require special hospital garments. To control infection, hospital policy requires that only those garments supplied by the hospital

be used. Students who are unable to wear and be covered by these garments will not be allowed to go into that clinical area, and this may jeopardize their ability to complete the curriculum.

6. Failure to meet any dress requirements may jeopardize the student's ability to continue in a curriculum.

STUDENT CLASSIFICATION

Full-time	A student who is enrolled in 12 or more credit hours of course work.
Part-time	A student who is enrolled in fewer than 12 credit hours of course work.
Special Credit	A student who is enrolled in credit courses but who is not working toward a degree, diploma or certificate.
Audit	A student who is enrolled in regular course work but who is not receiving credit for work undertaken.

PRETECHNICAL PROGRAM

This program offers a series of courses for preparation, remediation, and academic guidance to students who, for a variety of reasons, need additional courses because they do not meet the specific entrance requirements for the curriculum of their choice. The student's academic study program is individually designed to meet that student's specific needs. The program provides students with an opportunity to build academic skills and acquire the background which should facilitate success in their desired curriculum.

SPECIAL CREDIT POLICY

A special credit student is one who is taking one or more curriculum credit courses, but who is not enrolled in a specific curriculum. Special credit students are permitted to register for some credit courses without having to be admitted as a regular curriculum student, provided that prerequisites have been met and that such registration does not preempt students enrolled in a degree, diploma or certificate curriculum. Some credit courses will not be available to special credit students without prior instructional division approval.

For admission to FTCC, a special credit student needs to be a high school graduate and to complete the student application. All special credit students may be asked to take the CPT and furnish an official transcript, unless these requirements are waived by the Admissions Office. Special credit students must submit an updated application and meet regular admission requirements to be approved or reclassified as a curriculum student. Satisfactory completion of courses as a special credit student does not guarantee admission to a curriculum.

(Special credit students who earn 30 credit hours will be advised to seek admission into a curriculum). However, there are no limitations on the number of credit hours earned by a special credit student. All credit hours will be evaluated for application to curriculum admission when and if the special credit student applies.

Generally, students are approved for special credit status in the following circumstances:

1. The student desires to take some relevant credit courses prior to being able to start a specific curriculum. The student may desire to complete these courses before entering that curriculum in order to reduce course load once in the program to improve chances for success.
2. The student desires to take specific courses, but does not plan to pursue and complete a curriculum at FTCC.
3. The student has been denied admission into a specific curriculum that has already reached its quota at the time of application but wishes to complete the related courses.

All policies, rules, and the Code of Conduct apply to special credit students. Special credit students are not eligible for any form of financial aid through FTCC.

Those students who are designated to be in the Pretechnical program based on placement test scores are not eligible to be considered as special credit students.

READMISSIONS

Students who have withdrawn in good academic standing should contact the Admissions Office to update their application. If the application for readmission is for a different curriculum, standard admission requirements for new students will apply.

Students who have withdrawn while on academic probation or who have been suspended for academic deficiencies must reapply through the Admissions Office. Approval for readmission to the same curriculum or a different curriculum will be based on the applicant's ability and aptitude, the time elapsed since withdrawing, recommendations of the Academic Review Committee, and the applicant's career objectives. Students granted readmission may have course load restrictions, specific grade requirements, and/or required counseling sessions in order to remain enrolled in the curriculum. When good academic standing has been reestablished, the restriction(s) will be removed.

There are specific additional guidelines for reentry into any of the health curriculums. These guidelines may be obtained from the Admissions Office.

Former students who reapply for admission may be asked to supply the Admissions Office with transcripts and test scores.

Students who have been suspended for disciplinary reasons or health/safety reasons cannot be readmitted without submitting a request for approval from the dean of Student Development Services.

INDEPENDENT STUDY

Independent study provides an alternative for a student to earn credit for certain required courses. It should be used only when it has been determined that it would create an unreasonable hardship for the student to wait for the course to be available. Guidelines to be used are as follows:

1. To be considered for independent study, students must file a Request for Independent Study form with their advisor who will review the request and forward it with suggestions to the division dean for final action. The form should be completed during registration, and the student must register for the course during the registration period.
2. Acceptable reasons for allowing a student to take an independent study are (1) one-time course sequencing difficulties, (2) scheduling problems that were no fault of the student, and (3) needing the course for graduation at the end of the quarter.
3. Students will not be approved for independent study if their cumulative GPA is less than 2.0 or if they have failed or withdrawn failing from the course in question.
4. Students will not be allowed to take more than two courses as independent study during the entire time in a curriculum. Exceptions require special approval from the division dean.
5. All independent studies must be taught by a full-time instructor.

PROFICIENCY EXAMS

A student who has been approved for admission or a student already enrolled in a curriculum of study may request to take a proficiency exam for a course for which a proficiency exam is available. It is not necessary for a student to be registered or enrolled in a course before requesting a proficiency exam. However, if the student is enrolled in a course for which a proficiency exam is requested, the request must be made by the tenth class day. A student who withdraws from a course after the tenth class day in any quarter and has not formally submitted a request cannot earn credit by proficiency exam for a period of one year. The academic advisor will certify that the student has not been enrolled in the course within the past year and that the prerequisites for the course have been satisfied. Some curriculums have restricted proficiency exams, and the student must be admitted to that curriculum before a request will be considered. A student may take a proficiency exam for a given course only once in a twelve-month period. A Request for Proficiency Exam form must be completed and a $10.00 nonrefundable charge is assessed for each proficiency exam. Students who successfully pass a proficiency exam for a class will be given a grade of CR and hours earned will be granted but it will not affect grade point average. Guidelines on how to apply for a proficiency exam can be obtained from the office of the appropriate division dean and the Counseling Center. Tuition and fees are nonrefundable.

TRANSFER STUDENTS

Applicants who have attended other institutions of higher learning may transfer credits in courses comparable in content, objective, quality, and credit hours to those offered at FTCC. Direct transfer of credits may be granted if the student is transferring from an institution that is regionally accredited or is a member of the North Carolina Community College System.

No grade lower than C may be transferred from other institutions. Courses taken on a pass/fail basis will be considered only after receiving information on requirements necessary to receive a pass grade. All final transcripts for transfer credit for questionable courses will be made by the director of Admissions after consultation with appropriate department chairs. A written evaluation will be sent to the student.

Credits transferred from other schools will be reflected on students' transcripts as hours earned and will not be used in the computation of grade point averages. A grade of TR will be given to show that the course was transferred from another college. When a student transfers between curriculums within FTCC, credits attempted, (including grades), hours earned, and quality points will be forwarded to any curriculum where the courses are identical. A student's initial cumulative GPA in a new curriculum will be computed from the credits forwarded to that curriculum. For courses that are not identical but are comparable, credit will be granted in the same manner as courses transferred from another institution. Such courses will not be used in computing GPA; only hours earned will be transferred, and a grade of CR will be given to show this credit.

Many courses with a technical or skill content have time limitations on the acceptance of transfer credit. This includes credits earned at other institutions and/or credits earned at FTCC. Generally, courses in this classification taken more than five years before entry into FTCC cannot be considered for transfer purposes. A complete list of these courses and the specific time limitations are maintained by the Admissions Office. In such instances, students may challenge out-of-date courses by proficiency examinations when appropriate and available.

Inquiries concerning transfer credits granted must be made to the admissions counselor during the student's first quarter of enrollment. If the student is not satisfied with the transfer credit as granted, requests should be made in writing to the director of Admissions, who will confer with the appropriate division dean. After deliberation between the division dean and the director of Admissions, the student will be notified of the final decision on transfer credit to be granted.

TRANSFER OF EARNED CREDIT BETWEEN FTCC CURRICULUMS

Credits earned in any FTCC two-year curriculum may be credited toward other two-year curriculums or a diploma curriculum upon evaluation and acceptance by the director of admissions. Credits earned in a diploma curriculum are not acceptable for transfer to an associate degree curriculum but may be credited toward a second diploma major.

TRANSFER TO SENIOR COLLEGES AND UNIVERSITIES

The College Transfer curriculum is designed to provide a quality educational experience equivalent to the first two years of a liberal arts college curriculum. Students who have earned the degree of A.A. (Associate in Arts) or A.S. (Associate in Science) can transfer to most public or private senior institutions with full junior-year standing. A minimum GPA of 2.0 is required for acceptable transfer credit.

The curriculum enables the student to prepare for virtually any area of major interest. It covers six (6) quarters and offers courses in mathematics, literature and grammar, humanities, physical education, and the social, physical, and life sciences. Counselors and advisors are available to assist students in planning acceptable programs for transfer to the desired college or university. The Career Guidance Center maintains copies of all College Transfer Agreements for student review.

Students who need to improve their academic skills or gain credit for courses not taken in high school can do so through Pretechnical noncredit courses.

Technical-level credit earned in the A.A.S. (associate in applied science) degree programs at FTCC may be transferred to similar programs at other institutions. Acceptability of all technical transfer credit is determined by the institution to which the student wishes to transfer. Diploma credit is not transferable to senior institutions.

The Career Guidance Center also maintains a list of senior colleges and universities which currently accept some or all of the credit earned in a technical-level (associate in applied science) curriculum. However, it is the student's responsibility to contact the Admissions Office of the receiving institution for transfer information.

COURSE CREDIT AND ADVANCED PLACEMENT

Advanced placement credit or exemption from specific degree requirements in the College Transfer curriculum may be granted by FTCC. Students should contact their secondary school counselors regarding dates and local test centers.

COLLEGE BOARD ADVANCED PLACEMENT (AP) PROGRAM

Secondary school students enrolled in AP courses may receive college credit by taking AP examinations upon completion of the course and forwarding the results to the Admission Office for evaluation.

ADVANCED PLACEMENT EXAMS

Exam	Score Required	Hours Granted	Courses
American History	3	10	HIS 150,151
Biology	3	12	BIO 120,121,122
Chemistry	3	4	CHM 110
Chemistry	4 or 5	12	CHM 110,111,112
English	3 or 4	5	ENG 150
English	5	10	ENG 150,151
European History	3	10	HIS 101,102
Government and Politics, American	3	5	POL 102
Mathematics-Calculus AB	3	5	MAT 125
Mathematics-Calculus AB	4 or 5	10	MAT 125,126
Mathematics-Calculus BC	3	10	MAT 125,126
Mathematics-Calculus BC	4 or 5	15	MAT 125,126,127
Physics B	3	10	PHY 211,212
Physics C	3	15	PHY 211,212,213

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

The Family Educational Rights and Privacy Act of 1974 (FERPA) provides many safeguards regarding the confidentiality of and access to student records.

1. Students may review their educational records by making a written request to the director of Records and Recruitment.
2. Student records will not be reviewed by third parties unless permission is obtained in writing from the student. Exceptions may be made for instructors and administrators if the information is for educational purposes. Exceptions may also be made for parents who claim the students as dependents and for credentialing, auditing, or accrediting organizations. The dean of Student Development Services will make the final decision concerning access to records.
3. Official transcripts will be issued only when a written request is received from the student. Transcripts from high schools or other colleges will not be released.
4. FTCC does not publish or distribute directory information or any personally identifiable information.

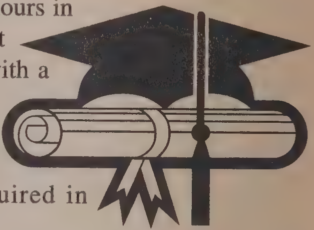
5. FTCC publishes the names of graduates in the graduation program and in local news media. Names of students attaining quarterly academic honors are also published. Students who do not wish their names published must notify the Records Office in writing of their desire not to have their names published for graduation or academic honors.
6. Authorities with court orders are permitted to review records in the presence of Student Development Services administrative staff.

GRADUATION REQUIREMENTS

A student wishing to receive a degree, diploma, or certificate from FTCC must fulfill all course requirements. Students must have earned a cumulative grade point average of 2.0 in the curriculum from which they are graduating and must have received a passing grade in all required courses to be eligible for graduation.

Grade point average is obtained by dividing the total quality points earned by the total number of credit hours attempted.

A candidate for an associate's degree must complete at least 32 quarter hours of credit work at FTCC, with a minimum of 16 quarter hours in the major area. A candidate for a diploma must complete at least 16 hours of credit work at FTCC, with a minimum of eight (8) quarter hours in the major area courses. A candidate for a certificate of completion must complete a minimum of 25 percent of their required course work at FTCC. Credit hours required in residency may not be met by proficiency examination.



Course requirements vary according to curriculum. Students should refer to the course requirements for their curriculum of study to determine if all requirements have been met and should be aware at all times of their progress toward graduation. Course substitution may be granted by the appropriate dean when deemed necessary for graduation.

Students graduate with the course requirements that are applicable at the time they enroll in a curriculum if they remain continuously enrolled until graduation. Students who withdraw for two or more quarters from a curriculum must graduate with the course requirements that are in effect at the time they reenroll. Any exceptions must be approved by the appropriate division dean.

It is the responsibility of the student to complete the official Intent to Graduate form at least six weeks before their last registration. Intents filed within eight weeks of graduation will not be accepted for that graduation but will be applicable for the next graduation. Intent to Graduate forms are available in the Records Office or Cashier's Office. There is a $10 nonrefundable graduation fee that must be paid at the time the form is filed.

UNRESTRICTED ELECTIVES IN A.A.S. DEGREE PROGRAMS

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from a discipline outside the student's area of specialization.

GRADUATION HONORS AND AWARDS

Any student who has earned a cumulative GPA of 3.50-4.00 at FTCC will be granted a diploma or degree with High Honors. Any student who has earned a cumulative GPA of 3.00-3.499 will be granted a diploma or degree with Honors. A seal of recognition will be placed on the student's degree or diploma, and the student's transcript will be noted to reflect this achievement. To be eligible for Honors or High Honors, at least 32 quarter hours must be completed at FTCC for those students enrolled in an associate degree curriculum, and at least 16 quarter hours must be completed at FTCC for those students enrolled in a diploma program. Only graduates in curriculums leading to a degree or diploma qualify for this academic recognition. Graduates of the curriculums leading to a Certificate of Completion do not qualify.

QUARTERLY HONORS

President's List:

At the end of each quarter, a President's Honors List will be published to honor those students with a 4.00 GPA. To be eligible for the President's Honors List, students:

a) must be approved and enrolled in a curriculum, excluding Pretechnical students, General Technology core curriculum students, special credit students, and certificate students.

b) must earn a 4.00 GPA on a minimum of 8 credit hours of curriculum courses.

c) must have completed all course work for the quarter. Students with grades of I will not be eligible.

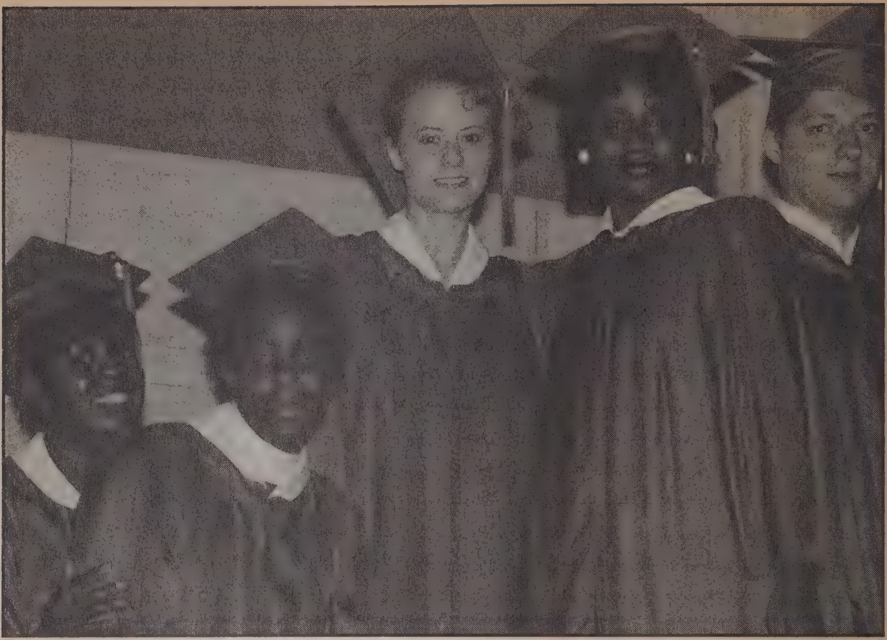
Deans' List:

The Deans' List is published quarterly to honor those students with a quarterly grade point average of 3.50 to 3.999. To be eligible for the Deans' List, students:

a) must be approved and enrolled in a curriculum, excluding Pretechnical students, General Technology core curriculum students, special credit students, and certificate students.

b) must earn a 3.50 GPA or above on a minimum of 8 credit hours of curriculum courses.

c) must have completed all course work for the quarter. Students with grades of I will not be eligible.



COMMENCEMENT EXERCISES

Commencement exercises are held at the end of spring and summer quarters on the dates published in the academic calendar. Degrees, diplomas and certificates are awarded at this time. Students are expected to notify the Records Office as to their intention to participate in the exercises when they submit their Intent to Graduate form.

COMMENCEMENT MARSHALS

Marshals are selected from full-time students in technical and College Transfer curriculums who have maintained the highest scholastic averages. The marshal who has the highest academic average is named chief marshal.

SCHOOL RINGS AND PINS

Students in good standing who have completed at least one-half of the credit hours required for graduation in their curriculum may order a school ring. The student is required to pay a deposit at the time the ring is ordered with the balance due upon delivery.

Pins for health curriculums are also available. Orders for both pins and rings may be placed with the bookstore.

SEALED RECORDS

A student's records may be sealed from the student's review and closed for purposes of readmission and grade posting due to financial debt to the school or litigation involving the student and the school. Inquiries regarding sealed records should be directed to the Records Office. Transcripts will not be issued as long as the file remains closed.

STUDENT CODE OF CONDUCT AND RESPONSIBILITIES

CODE OF CONDUCT

The act of enrollment at FTCC includes an acceptance by the student of the rules of FTCC. By enrolling, the student accepts the obligation to assist in making FTCC an effective place to conduct a learning process and to engage in the pursuit of truth, the development of self, and the improvement of society. Each enrolled student is considered to be a responsible adult, and FTCC assumes and requires that men and women who enroll in the various programs will maintain standards of conduct appropriate to the status of students at FTCC.

FTCC has an inherent responsibility to maintain order on its campus. Therefore, students may or shall be suspended or dismissed for behavior deemed incompatible with the mission, the regulation, or the responsibility of FTCC, or deemed to be in violation of any of the provisions of the Code of Conduct as set forth herein.

FTCC recognizes the right of an enrolled student to receive a full opportunity to learn and develop, unfettered by any and all obstacles not conducive to a sound, fundamental educational program. To this end, FTCC recognizes, declares, and vests certain rights in each student enrolled at FTCC.

STUDENT RIGHTS

A. Legal Rights

All the rights and privileges guaranteed to every citizen by the Constitution of the United States and by the State of North Carolina shall not be denied any student. Furthermore, FTCC shall adhere to all of the statutes of the United States and State of North Carolina. FTCC has recognized the Student Government Association as the approved agency to voice students' opinions and speak on institutional policies concerning students' activities.

B. Rights of the Learner

The instructor in the classroom and in conference shall encourage free discussion, inquiry, and expression. Student performance will be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards.

C. Student Records

The Family Educational Rights and Privacy Act of 1974 (FERPA) provides safeguards regarding the confidentiality of and access to student records.

1. Students may review their educational records by making a written request to the director of Records and Recruitment.
2. Student records will not be reviewed by third parties unless permission is obtained in writing from the student. Exceptions may be made for instructors and administrators if the information is for educational purposes. Exceptions may also be made for parents who claim the students as dependents and for credentialing, auditing, or

accrediting organizations. The dean of Student Development Services will make the final decision concerning access to records.

3. Official transcripts will be issued only when a written request is received from the student or upon written authorization by a student to be released to a designated entity. (See Family Education Rights and Privacy Act of 1974 on page 31 for additional information.) Transcripts from high schools or other colleges will not be released.

D. Freedom of Association

Students are free to organize and join an association organized or existing to promote the student's curriculum or career interest. Student organizations must be approved by the Student Government Association in order to ensure FTCC's policies and procedures are adhered to and followed.

E. Due Process

Due process procedures are established to guarantee the right of hearing, a presentation of charges, evidence for charges, the right of confrontation by the questioning of witnesses, and the right to counsel by the accused student, if so requested by the student. Any student aggrieved by the violation of this Code of Conduct shall have the right of appeal to the Student Appeals Committee as hereinafter provided.

GENERAL CAMPUS RULES

The following is a general summary and classification of the major rules of student conduct, and any violation shall be considered a violation of this Code of Conduct. For purposes of FTCC rules and regulations, FTCC grounds are defined as any location owned, leased, rented, controlled, or otherwise occupied by FTCC or any division.

Rule 1. Disruption and Disorderly Conduct

A student shall not engage directly or aid and abet in disorderly conduct which is intended to provoke violent retaliation or cause a breach of peace or which disrupts, disturbs, or interferes with the normal routine activities or teaching of students, or which disrupts, disturbs, or interferes with the peace, order, or discipline on FTCC grounds.

Rule 2. Damage to or Destruction of FTCC Property

A student shall not intentionally, willfully or wantonly cause, or attempt to cause, substantial damage to be done to FTCC property, or shall not steal, or attempt to steal, FTCC property.

Rule 3. Damage to or Destruction of Private Property

A student shall not intentionally, willfully or wantonly cause, or attempt to cause, damage to private property of another, or shall not steal, or attempt to steal, private property of another when on FTCC grounds or while attending an FTCC activity, function, or event held off FTCC grounds.

Rule 4. Assault on or Verbal Abuse of FTCC Employee

A student shall not intentionally cause, or attempt to cause, physical injury, verbal abuse, harassment, or communicate a threat to an FTCC agent, servant, or employee at any time while such student is enrolled at FTCC.

Rule 5. Assault or Verbal Abuse of Persons Other Than Employees

A student shall not intentionally cause, or attempt to cause or threaten to cause, physical injury, verbal abuse, harassment, or communicate a threat, or direct any profane language toward any other student or FTCC guest, visitor, or invitee at any time while such student is enrolled at FTCC, or while such student is on FTCC grounds or is attending an FTCC activity, function, or event held off FTCC grounds.

Rule 6. Weapons and Dangerous Instrumentalities-NC General Statute 14-269.2

It is unlawful for anyone to possess any weapon, whether openly or concealed, while on private school or public school property unless it is used as part of a school activity or ceremony. In essence, the statute refers to any and all property owned, used, or operated by any Board of Education, school, college, or university for the administration of any public or private educational institution. In practice, then, this statute permits prosecution of anyone carrying any dangerous instrument in school, on school grounds, or at any school activity.

Rule 7. Narcotics, Alcoholic Beverages, and Controlled Substances

A student shall not knowingly or negligently own, possess, use, transport or be at any time under the influence of any narcotic drug, alcoholic beverage or any other controlled substance (as controlled substance is defined by the North Carolina General Statutes or 21 U.S.C. subsection 812) while on FTCC grounds or during the time when a student is participating in any FTCC activity, function, or event off FTCC grounds. Use of any drug authorized by medical prescription from a registered physician shall not be considered a violation of this rule. However, students shall be held strictly accountable for their behavior while under the influence of prescribed medicines.

Rule 8. Classroom and Campus Activities

A student shall comply with all directions of teachers, student teachers, substitute teachers, teacher's aides, FTCC administrators, or authorized personnel during any time when the student is under the authority of FTCC personnel. A student on campus shall promptly identify himself to an FTCC official or campus security officer at all times upon reasonable request. A student shall appear before FTCC officials or disciplinary bodies when so directed. Any failure by any student to promptly and cheerfully obey or to abide by these regulations in this Rule 8 shall constitute a violation of this Code of Conduct.

Rule 9. Academic Dishonesty, Cheating, Forgery, and Related Offenses

It shall be a violation of FTCC Code of Conduct for a student to commit any one of the following acts:

1. Academic cheating, including, but not limited to, unauthorized copying of academic work of another, collaboration for use of notes or books on examinations without prior permission of the instructor.
2. Plagiarism or the intentional presentation of work of another without proper acknowledgment of the source.
3. Fabrication and falsification or the intentional misrepresentation of any information or citation in an academic exercise.
4. Submission of substantial portions of the same academic work for credit more than once without authorization.
5. Abuse of academic materials in the form of destruction, theft, or concealment of library or other resource material of another student's notes or laboratory experiments.

6. Complicity in academic dishonesty in helping or attempting to help another student to commit an act of academic dishonesty.
7. Furnishing of false information to any FTCC personnel including forgery, falsification, or fraudulent misuse of any documents, records, or identification cards.

Rule 10. State and Federal Laws

A student shall not violate any state or federal laws while on FTCC campuses or while attending an FTCC activity, function, or event off FTCC grounds.

Rule 11. Student Attire Code

Although FTCC students may dress informally, cleanliness and neatness of appearance must be maintained. Shirts and shoes are required at all times while the student is on campus or at all times while such student is attending an FTCC activity, function, or event off FTCC grounds. Special technical or vocational curriculums, such as the health curriculums, may require special attire for clinical or laboratory areas. A student shall not attend classes or laboratory work conducted in the clinical or laboratory areas if such student is in violation of the attire codes for such areas.

Rule 12. Involuntary Psychological or Psychiatric Withdrawal

It shall be grounds for dismissal if and when it shall be medically determined that a student poses a threat to the physical well-being of himself or others or if such student has a physical, mental or emotional condition of such a nature as to disturb or disrupt the normal and usual activities of other persons on campus. A student shall agree to have a psychiatric evaluation when it appears to the satisfaction of the president of FTCC, or her designee, that such examination is in the best interest of the student, or FTCC, or both.

Rule 13. Children in Classrooms or Shop Areas

Children are not allowed in classrooms or shop areas during class sessions, nor may they be left unattended in the library, canteen areas, or on campus grounds

VIOLATION OF THE CODE OF CONDUCT

The following are the degrees of disciplinary action which may be taken as a result of violation of the Student Code Conduct:

A. **Warning** - A written notice to the student that continuation or repetition of specified conduct will be cause for further disciplinary action.

B. **Disciplinary Probation I** - A written reprimand to the student for violation of a specified rule, which may include exclusion from participation in a class or specified activities for a specified time as set forth in the notice.

C. **Restitution** - Reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or compensate for damages.

D. **Suspension** - Exclusion from class or classes and other student privileges or activities as set forth in the notice of suspension.

E. **Dismissal on Expulsion** - Termination of student status for a definite period of time. At the end of this period of expulsion, the student is eligible to apply through the dean of Student Development Services for consideration for readmission.

F. **Other** - Other types of discipline as set forth in campus rules and regulations consistent with the incident involved.

If as a result of a violation of the Student Code of Conduct a student is dismissed from class or classes, the student may receive a failing grade(s), and the disciplinary dismissal will be recorded on the student's transcript as an Administrative Withdrawal.

The conviction of a student of a criminal offense involving personal misconduct of a kind, which, if condemned by the College, would reflect dishonor or discredit on the College, shall be sufficient grounds for suspension or dismissal of such students.

ENFORCEMENT PROCEDURES

Student conduct on an FTCC campus or student conduct during an FTCC activity, function, or event held off FTCC grounds that violates federal and/or state and FTCC regulations may be dealt with in the following manner:

1. The student may be turned over to the civil authority and subjected only to the penalties imposed by that authority; or
2. The student may be subjected to sanctions imposed both by the civil authorities and FTCC; or
3. The student may be subjected to sanctions imposed by FTCC notwithstanding the fact the civil sanctions may not be imposed.

DISCIPLINARY PROCEDURES

A. **Instructional Areas**

Any instructor may request a student to leave a class, laboratory, shop, or clinical area when, in the opinion of the instructor, the student's conduct or personal demeanor disrupts normal classroom activities. If the student refuses to leave the class, the instructor may call campus public safety for assistance. The instructor, identifying the student and the cause for dismissal from class, will immediately notify in writing the division dean and the dean of Student Development Services of actions taken.

The burden of requesting reentry to class, laboratory, or clinical areas will be upon the student involved. Request for reentry must be made to the instructor before the next class meeting. If the instructor decides that the student needs additional counseling before reentry, the instructor may require that the student meet with the division dean or the counseling staff for further discussion. If the division dean or the counseling staff decides that the student should be dismissed from the class or from FTCC, the instructor will send a written report (approved by the division dean) to the executive vice president for Instructional Services and the dean of Student Development Services. The executive vice president and the dean of Student Development Services will make the decision on dismissal when applicable and dismiss the student. The student will be given a copy of the report and a written notification of the decision. If a student wishes to appeal the decision, the appeal must be made by writing the Student Appeals Committee within twenty-four (24) hours after receiving the dismissal notice.

B. **Noninstructional Areas**

Any employee or student may file a written complaint for disciplinary action against any student enrolled at FTCC. The Public Safety Office may temporarily remove a student from campus when the student is jeopardizing the safety and security of faculty, staff, and/or the student body; a written complaint must then be filed. The complaint must be filed with the dean of Student Development Services, who will promptly investigate the complaint and make a decision regarding suspension, dismissal, or other disciplinary action. Both the complainant and the student involved will be notified in writing. If the student wishes to appeal the decision of the dean of Student Development Services, the appeal must be made by writing the Student Appeals Committee within twenty-four (24) hours after receiving the notice of the decision.

STUDENT APPEALS COMMITTEE

The Student Appeals Committee will hear the appeal of any student after the appeal process has been exhausted at the department and division levels for instructional areas or the dean of Student Development Services for noninstructional areas. The Student Appeals Committee will hear the appeal of any student regarding the following:

1. discipline;
2. dismissal, except for academic standing;
3. admissions;
4. residency;
5. discriminatory practices, including violations of Americans with Disabilities Act (ADA);
6. sexual harassment.

The appeal will be heard under the following conditions within two (2) working days of receipt of the confirmed appeal:

1. The student must submit a written statement containing factual and valid reasons for the appeal to the dean of Student Development Services, who will forward the statement of appeal to the committee chairperson. The chairperson may return the appeal to the student to clarify, to add factual information, or to state reasons for the appeal; the chairperson may reject the appeal if policies and procedures have not been followed by the student.
2. The committee will confine itself to making a recommendation on the appeal question and not on the validity of existing policies of FTCC. The committee reserves the right to suggest to the president that a current policy be examined for continued value to FTCC.
3. The committee will submit its recommendation to the president who will make a final decision and who will notify the parties involved.
4. In matters concerning residency classification, the committee's recommendation will be sent to the dean of Student Development Services, who will notify the parties involved of the decision. The next step in the appeal process is to the State Residency Committee. Procedures on state appeal are available in the dean of Student Development Services' office.
5. Records of the proceedings of the Student Appeals Committee are

available upon written request to the dean of Student Development Services.

6. The student must obtain special permission from the executive vice president for Instructional Services to attend classes pending resolution of the case on appeal.

Definition of Academic Dishonesty

The following are further explanations of violations of Rule 9.

Plagiarism:

Definition: The intentional presentation of the work of another as one's own without proper acknowledgement of the source. The sole exception to the requirement of acknowledging sources is when the ideas or information are common knowledge.

Plagiarism as the result of misunderstanding or misapplying the rules of documentation may be unintentional but it is still plagiarism. Plagiarism includes but is not limited to:

a. Copying from a written source, another student, or a data base (whether professional or non professional; whether published or nonpublished) without proper citation in either a document or a speech.
b. Rewording (paraphrasing) or summarizing someone else's material without proper citation in a document or a speech.
c. Failing to cite word-for-word passages in a document or a speech.
d. Using purchased prewritten materials (including computer programs and files, research designs, distinctive figures of speech, ideas and images, or generally any information belonging to another) as your own or having someone else do your work.

Cheating:

Definition: Intentional use or attempted use of authorized materials, information, notes, study aids, devices or other assistance in any academic exercise. This definition includes unauthorized communication of information during an academic exercise. Cheating includes but is not limited to:

a. Copying from another student's paper or receiving unauthorized assistance during a quiz, test or examination.
b. Procuring without authorization tests or examinations before the scheduled exercise (including discussion of the substance of examinations and tests when it is expected they will not be discussed).
c. Copying reports, lab work, computer programs or files and the like from other students.
d. Collaborating on laboratory or computer work without authorization and without any indication of the nature and extent of the collaboration.
e. Sending a substitute to take an examination.
f. Receiving assistance in locating or using sources of information in an assignment where such assistance has been forbidden by the instructor.

Fabrication and Falsification:

Definition: Intentional alteration or invention of any information or citation in an academic exercise. Falsification refers to the alteration of information, such as altering research, clinical or practicum data. Fabrication refers to the invention or counterfeiting of information, such as inventing research or clinical data or records. It would also include altering grade reports or submitting false records for tardiness and absences for scheduled academic exercises. Altering a returned examination paper and seeking regrading also constitutes falsification.

Multiple Submission:

Definition: The submission of substantial portions of the same academic work (including oral reports) for credit more than once without authorization, including submitting the same paper for credit in two courses without instructor permission.

Abuse of Academic Materials:

Definition: Intentional destruction, theft, or concealment of library or other resource material, or of another student's notes or laboratory experiments.

Complicity in Academic Dishonesty:

Definition: Intentionally helping or attempting to help another to commit an act of academic dishonesty, such as those acts noted above. Collaboration and sharing information are characteristics of academic communities. These become violations when they involve dishonesty. Students should seek clarification when in doubt.

POLICY ON COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT

A policy on compliance with the American with Disabilities Act is in effect at Forsyth Technical Community College and published in the *Employee Handbook.* The Board of Trustees of FTCC intends to comply with the requirements of the Americans with Disabilities Act and provide access to education for persons with disabilities as part of the mission of the institution. The ADA coordinator for FTCC should be contacted with questions or concerns regarding ADA.

INFECTIOUS DISEASE POLICY

FTCC is committed to ensuring, as far as possible, that each employee and student enjoy safe and healthful work and/or study conditions. To this end, the college offers the following information for students and employees.

This policy information presents the procedures to be used by FTCC to protect those students and employees who may be exposed to infectious diseases and bloodborne pathogens. Bloodborne pathogens include, but are not limited to, the Human Immunodeficiency Virus (HIV), which is the causative agent for Acquired Immune Deficiency Syndrome (AIDS), and Hepatitis B Virus (HBV). These procedures are based on written requirements published in the Federal Register (29 CRF 1919.1030).

Persons infected or reasonably believed to be infected with communicable diseases shall not be excluded from enrollment or employment, or restricted in their access to the institution's services or facilities unless medically based judgments in individual cases establish that exclusion or restriction is necessary to the welfare of the individual or the welfare of other members of the institution.

Persons who know or have a reasonable basis for believing that they have an infectious/communicable disease which may pose a threat to others have an obligation to conduct themselves in accordance with such knowledge, so as to protect themselves and others. Accordingly, employees should report this information to the assistant to the dean of Human Resources, and students should report to the dean of Student Development Services. All information will be kept confidential except to those persons determined by the administrative assistant and the dean of Student Development Services as having a need to know. These persons will be informed after the individual is advised that such action will be taken.

It is the further declared policy of FTCC that its faculty, administration, and staff will conduct a continuing information program for all areas of FTCC personnel regarding communicable diseases and disabling illnesses.

DRUG-FREE STUDENT POLICY

Drug use and abuse by students have become immediate concerns in our society. These problems are extremely complex with no easy solutions.

The users of drugs may impair the well being of all students and the educational environment, and may damage FTCC property.

Therefore, it is the policy of FTCC that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited while on FTCC grounds.

1. FTCC does not differentiate between drug users and drug pushers or sellers. Any student who gives or in any way transfers or aids and abets in the transfer of a controlled substance to another person or sells or manufactures or aids and abets in the sale or manufacture of a controlled substance while on FTCC premises will be subject to disciplinary action up to and including suspension from school.
2. The term “controlled substance” means any drug listed in the North Carolina General Statutes or 21 U.S.C. subsection 812 and other federal regulations. Generally, these are drugs which have a high potential for abuse. Such drugs include, but are not limited to, heroin, marijuana, cocaine, PCP, and “crack.” They also include “legal drugs” which are not prescribed by a licensed physician.
3. The counseling staff will conduct quarterly mandatory drug awareness and education workshops for students. Individual counseling sessions and educational materials will be available in the Counseling Center at all times.
4. The counseling staff will include in orientation sessions reference to drug policies, drug awareness and sources for assistance.
5. The counseling staff will be available to lecture and assist instructional staff with class presentations to help educate students regarding alcohol and other drug use as well as the health risks of drug abuse.
6. The counseling staff will have available referrals for treatment and more extensive assistance.
7. Student Development Services will assess the institutional environment annually by reviewing data from Public Safety, the Counseling Center, instructors, and other community resources to guide program development for students.

CRIME AWARENESS AND CAMPUS SECURITY ACT

Staff, faculty and students of FTCC are encouraged to report all criminal actions and other related emergencies to the Public Safety Office, which is located in the Carolina Annex. A special emergency number has been established. Staff, faculty, and students may dial Ext. 325 from any campus telephone (excluding public pay telephones) and receive immediate assistance. The special 325 number is publicized by placing stickers on each campus telephone. Pay telephones provided throughout campus locations are available for students to dial 911 for immediate assistance.

Upon receipt of a complaint, a Public Safety officer is assigned to the case. The complaint is documented, investigated, and processed by the investigating officer. If necessary, or where appropriate, an outside agency such as the Winston-Salem Police Department is contacted for assistance. Other staff of the college, such as the dean of Student Development Services, may also become involved where appropriate.

All complaints are reviewed and, where appropriate, action is taken by the director of Public Safety. Further review and action may occur up through the chain of command, including the president and Board of Trustees.

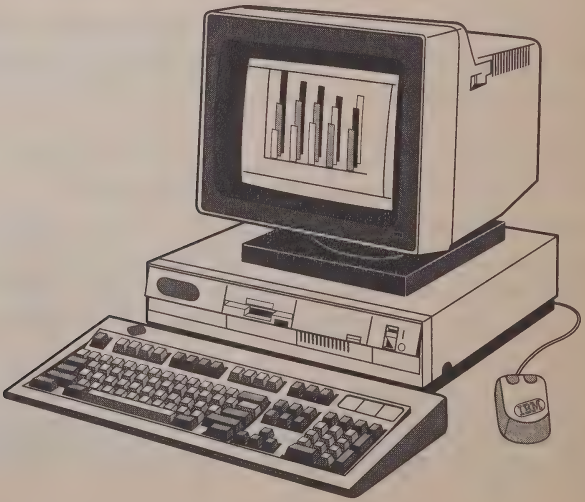
A Public Safety officer is on duty at all times regular classes are in session.

COMPUTER SOFTWARE COPYRIGHT POLICY

FTCC purchases licenses for use of a wide variety of copyrighted computer software. The college does not own the copyright on this software or its related documentation and, unless authorized by the software developer or publisher, does not have the right to reproduce it.

According to the United States Copyright Law, illegal reproduction of computer software can be subject to civil damages up to $100,000 and criminal penalties including fines and imprisonment.

FTCC does not condone the illegal duplication of computer software or the use of illegally duplicated software. College employees and students shall use computer software only in accordance with its licensing agreements. Any employee or student who makes, acquires, or uses unauthorized copies of computer software shall be subject to disciplinary action.



SERVICES FOR STUDENTS

ACCIDENT INSURANCE

Accident insurance covering the hours a student is in school, on field trips, or participating in student activities is provided to all full-time and part-time curriculum students. The student insurance is furnished by FTCC as a service to students, but it is not meant to replace a student's personal coverage.

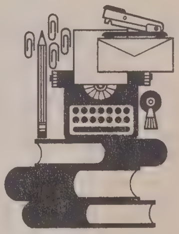
BOOKSTORE

The bookstore is operated by FTCC as a service to students, faculty, and staff. Textbooks, school supplies, and course-related materials, as well as other items of special interest to students, are offered for sale. The bookstore is adjacent to the student center in Snyder Hall and is open Monday through Friday from 8:30 a.m. until 3 p.m. and Monday, Tuesday, and Thursday from 6 p.m. until 8 p.m.

The bookstore strives to stock as many texts as possible at the beginning of each quarter, and students have the option to sell their used books at the end of each quarter.

Full refunds are given during the first two weeks of each quarter in accordance with policies posted in the store. Books must be unmarked and accompanied by the original sales receipt.

Book Return Policy



1. Last day of returns: two weeks from the first day of class (posted in store).
2. No refund without receipt.
3. No cash refunds on grants.
4. Books must be unmarked and in good condition.
5. Writing name in book will cause a $2.00 deduction from refund even if class is cancelled.
6. A wrongly purchased book can be exchanged for correct book only.
7. Optional study guides - no refund.

Books for continuing education courses are sold at the West Campus bookstore during specified hours at the start of each quarter.

Summer quarter evening hours will be posted at the bookstore.

COUNSELING CENTER

The Counseling Center maintains a staff of professional counselors whose services are available to students needing help with educational, vocational, financial, social, or personal problems from the time they enter school until they leave. Assistance is provided to facilitate wise choices, decisions, and adjustments associated with being a student. The counselors also serve as consultants to faculty and staff in helping to meet the educational needs of students. The counselors are available to both day and evening students in the Counseling Center located in the Allman Center.

Several individualized tests and inventories are available for counseling purposes, and students are referred to appropriate community agencies or resource persons when it is apparent that they can be assisted more effectively in this manner.

Instructors may refer a student who is experiencing difficulties directly to the Counseling Center, or the instructor may request that the counselor contact the student for an appointment.

The counseling staff adheres to a policy of confidentiality for information disclosed in personal counseling sessions. However, exceptions may be made when students represent a danger to themselves or others, or if students disclose that they are involved in an illegal activity. Counselors generally do not have protection from disclosure in court.

The counseling staff adheres to the Ethical Standards of the American Counseling Association and the National Board for Certified Counselors.

CAREER GUIDANCE CENTER

Professional counselors provide career exploration and planning assistance to individuals through the Career Guidance Center. Participation involves a group intake session which allows the counselor to evaluate the needs of the participant. A variety of available inventories helps the counselor and participant explore interest areas. Follow-up appointments provide personalized information.

Sources of occupational information are also available to assist in the exploration of career options. College information and catalogs can help in locating information on majors and schools.

Contact the Counseling Center, which is located in the Allman Center, for more information.

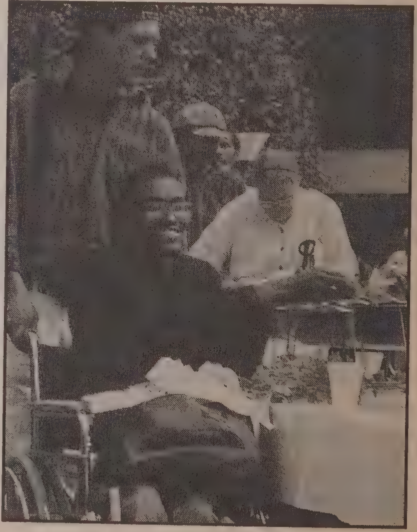
FOOD SERVICE

A full-service cafeteria is located in the lower level of Hauser Hall. Vending services are available in Snyder Hall, Parkway Building, Carolina Building, Greene Hall, Allied Health Building and on West Campus.

SPECIAL PROVISIONS FOR PERSONS WITH DISABILITIES

It is the intent of FTCC that all courses of study be accessible to qualified students. Persons with documented disabilities should provide approximately one quarter's advance notice to the Special Services/Testing/ADA coordinator in order to identify any special equipment needs and to facilitate adjustments in curriculums, facilities, or schedules, if needed.

Special services currently available for persons with disabilities include, but are not limited to: tutors, readers, and notetakers; a TT (text telephone); staff members with basic manual language skills; taped texts; adapted computer equipment; and modification of placement test administration. These free services may be arranged in the Counseling Center and in the Learning Center. Students who require attendant care are responsible for their own arrangements.



HEALTH SERVICES

Limited health services are provided through the Public Safety Office. First-aid supplies are located in shop areas; however, injuries requiring more than minor first-aid will be treated in the emergency room of either Forsyth Memorial Hospital or North Carolina Baptist Hospital.

HOUSING

Since FTCC has no dormitory facilities, students who wish to live away from home must make their own housing arrangements. FTCC takes no responsibility for locating or supervising student housing; however, suggestions as to location of off-campus housing may be obtained in the Counseling Center.

LEARNING CENTER

The Learning Center offers the following services and programs, all designed to help increase the success rate for students and to assist the faculty. For more information contact the Learning Center.

Courses

The Learning Center offers 16 courses that students take under the direction of an instructor. The students cover the subject material at their own pace, using programmed texts and supplementary materials. When students need help they receive extended individual attention from the instructors.

Studying in the Learning Center offers students flexibility in scheduling: the center is open from 8 a.m. to 9 p.m. Monday through Thursday, and 8 a.m. to 2 p.m. on Friday. Students can attend class during any of these times, enabling them to work around outside commitments such as job and family demands. The Learning Center also offers an alternative if a classroom course is full or is canceled.

Perhaps the greatest advantage of taking a course in the Learning Center is the sense of satisfaction and self–confidence that develops from working successfully in an individualized setting.

Tutoring Services

Tutoring Services offers several methods for helping students who are having academic difficulties. Tutoring is done in one–to–one or small group sessions 2 or 3 times a week. Tutors are primarily fellow students who have received training. Students can get help in virtually every academic course offered on the main campus. The Learning Center also has math, science, reading and basic writing skills labs, all staffed by well–qualified lab assistants. Students can use these labs on a drop–in basis. Both tutoring and lab help are free to the students, but the students must be referred by their instructor. Another service to help students is a variety of workshops on learning skills, conducted by Learning Center staff.

The various tutoring services share the goal of helping FTCC students become independent, life–long learners and increasing retention rates.

Computers for Writing Papers

The Learning Center has pc's for students to write class papers, reports, assignments, etc. This free service is available to any enrolled student doing class-related work.

Placement Test Preparation

Most people entering FTCC are required to take a placement test. To help these potential students, the Learning Center offers worksheets, practice tests and tips on test taking. This service is especially helpful for people returning to school after a long absence.

Services for Instructors

The Learning Center has several services for instructors. The Center can administer make–up tests for instructors whose students miss a test; it houses and distributes the materials for the business telecourses; and it can provide special accommodations to help instructors comply with the Americans with Disabilities Act.

LIBRARIES

The two libraries contain approximately 32,000 books and audio-visual software. Accompanying audio-visual hardware is available for use in the libraries and classrooms.

Main Campus Library

The library, located in Ardmore Hall, is open Monday through Thursday from 7:30 a.m. until 9 p.m. and on Friday from 7:30 a.m. until 3 p.m.

Although no fines are charged, students are responsible for replacing books that are lost or damaged. Until replacement is made, library privileges will be revoked; the student will not be permitted to register, and the student's records will be sealed.

Allied Health Library at North Carolina Baptist Hospital

The library at the Allied Health Building is located on the first floor. It is open Monday through Friday from 8 a.m. until 3 p.m. This library serves all allied health curriculums.

LOST AND FOUND SERVICE

Lost and found articles on the main campus are handled by the Public Safety Office. On other campuses, the libraries in the Allied Health Building at the North

Carolina Baptist Hospital and the Information Registration Center on West Campus will handle lost and found articles. All lost articles of value should be reported to the Public Safety Office.

EMPLOYMENT ASSISTANCE CENTER

The Employment Assistance Center offers services free of charge to area employers, current students, and graduates of FTCC. Each year the EAC receives over 1,000 job listings from area employers. Students and graduates who register with the EAC may have access to these listings.

In addition, a representative from the Employment Security Commission of NC (ESC) is available in the EAC to work exclusively with FTCC students and graduates. Students who register with the on-campus ESC representative will have access to local, state, regional, and national job opening information.

The Employment Assistance Center also provides the following services to current students and graduates: individual career counseling, help in writing resumes and cover letters, interview preparation, and handouts and resource materials on marketability skills and job market information.

STUDENT CENTERS

A student center is located on the ground level of Snyder Hall. Students are encouraged to use the center as a place to meet, talk, eat, and relax.

A student lounge is available to students in the health curriculums in the Allied Health Building at the North Carolina Baptist Hospital.

A student lounge and cafeteria are available in Hauser Hall on the ground floor.

GUIDELINES FOR TELEPHONE CALLS TO STUDENTS

Students cannot receive telephone calls or messages at school except for an emergency. FTCC does not have the facilities to forward general messages to students. Relatives, friends, and associates should be asked not to contact students at school. In case of an emergency, however, the staff will make every effort to relay information to students. Those calling in an emergency will be asked to state the nature of the emergency, give a name, and a return telephone number. It is the policy of FTCC not to give out identifying information about students to telephone callers and/or unidentified persons without the permission of the student. Emergency calls should be directed to the operator, the Counseling Center, Public Safety, or the appropriate dean's office.

USE OF FACILITIES

The buildings and their contents exist solely for the education of FTCC's adult population. The use of the facilities for any other purpose is strictly prohibited. Any use of these facilities for personal gain will result in immediate disciplinary action.

Smoking is prohibited in all classrooms, laboratories, shops, and auditoriums.

Animals are prohibited inside the buildings. Any animal on the campus grounds must be on a leash in compliance with the City of Winston-Salem Leash Law Ordinance Section 3-18.

Children are not allowed in classrooms or shop areas during class sessions, nor may they be left unattended in the library, canteen areas, or on campus grounds.

JTPA PARTICIPANT SERVICE CENTER

FTCC has received funding through JTPA (Job Training Partnership Act) to operate the Participant Service Center. It is designed to improve the employability of participants enrolled in an approved curriculum by assisting them in overcoming barriers to employment due to educational and skill-training deficiencies. Emphasis is placed upon the importance of job survival skills, positive work attitudes, job development and placement at program completion. Interested persons may contact the JTPA coordinator located in the office of Student Financial Services.

WINS PROGRAM

The WINS (Women in Nontraditional Settings) program is a project that is uniquely designed to help prepare women for the changing world of the future. Career opportunities ranging from Architectural Technology to Automotive Mechanics, and Computer Engineering Technology to Residential Carpentry are available to those women who can meet today's challenges for higher salaries, more competitive opportunities, and job promotions.

WINS seeks to help break the cycle of women's low-pay, low-status employment. Women selected to participate in WINS are eligible for financial assistance to supplement the cost of books, child care, and transportation expenses. WINS also provides counseling services, academic advising, career information, testing, tutoring, and other supportive services to assist women to better cope in nontraditional settings.

Women planning to enroll in a nontraditional curriculum is advised to contact the WINS coordinator during the admissions process to schedule an interview.

SINGLE PARENT/DISPLACED HOMEMAKER PROGRAM

The Single Parent/Displaced Homemaker program at FTCC provides child care assistance, other direct support (tuition, books, transportation, etc.), counseling and workshops for full- or part-time students who are single parents, single pregnant women, or displaced homemakers enrolled in technical, vocational or general technology curriculums. The program is intended to give eligible students the flexibility to plan and complete a training program in order to become economically self-sufficient. However, those students who do not meet eligibility requirements or for whom funding is not needed may receive counseling and attend workshops. The coordinator maintains a tracking system which identifies and attempts to eliminate barriers to education for single parents/displaced homemakers. During the admissions process, single parents or displaced homemakers, should contact the Single Parents/Displaced Homemaker coordinator to schedule an interview.

STUDENT CLUBS AND ORGANIZATIONS

STUDENT GOVERNMENT ASSOCIATION (SGA)

The Student Government Association serves to promote interest in student affairs both on and off campus. The association is composed of all students who pay the student activity fee. Three representatives are selected from each of the instructional divisions to serve on the Executive Council. Representatives to the Executive Council elect the SGA officers from within the Executive Council. The student activities facilitator serves in an advisory capacity to the Student Government Association. The SGA and Student Activities Office are located in Snyder Hall.

STUDENT REPRESENTATION ON BOARD AND COMMITTEES

The president of the Student Government Association is a nonvoting member of the Board of Trustees of FTCC. Student representatives also serve on the Student Appeals Committee, the Graduation Committee, and other committees concerned with students.

STUDENT ACTIVITIES

FTCC strives to offer its students more than just an academic education. Efforts are made to provide students with extracurricular opportunities for involvement that will help to educate the total individual. By providing extracurricular activities, FTCC recognizes that a college education includes social, professional, and cultural involvement as well as academics. Students are invited to come by the Student Activities Office in the Snyder Hall and find out more about what FTCC has to offer outside the classroom.

STUDENT CLUBS, ORGANIZATIONS, AND ACTIVITIES

Architectural Technology Club

The Architectural Technology Club serves to promote architectural education, to recognize outstanding academic achievement, and to provide related services to FTCC and the community. All students enrolled in the Architectural Technology curriculum are invited and encouraged to join.

Data Processing Management Association (DPMA)

The Data Processing Management Association (DPMA) student chapter provides Business Computer Programming students with opportunities in the data processing field. Members of DPMA have opportunities to learn more about data processing through regularly scheduled meetings of the students, attendance at the local chapter meetings, and field trips to local computer facilities.

Epsilon Delta Gamma

Membership in Epsilon Delta Gamma is open to any student who is, or has been, enrolled in a course of study in the administration of criminal justice. The objectives of the organization are to promote public understanding of the problems and objectives in the administration of criminal justice and to evaluate the standards of, and foster greater understanding between, the agencies and departments in all areas of the administration of criminal justice.

Phi Theta Kappa Honor Society

Membership in Phi Theta Kappa is open to students enrolled in an associate's degree curriculum who have completed 12 or more credit hours with a cumulative GPA of 3.5 or above. This national organization has approximately 700 affiliate chapters and is sanctioned by the American Association of Community and Junior Colleges.

Society of Respiratory Care Students (SRCS)

The purpose of the SRCS is to increase community awareness of respiratory care, promote student fellowship, improve academic achievement, and generally enhance the educational experience of respiratory students.

Student Chapter of the Society of Manufacturing Engineers (SME)

The Student Chapter of the Society of Manufacturing Engineers is a service and social club open to students from the Manufacturing Engineering Technology and Drafting and Design Engineering Technology curriculums. The club is open to second-quarter students in these two fields. SME has raised and set aside funds for endowing a scholarship.

OTHER ORGANIZATIONS

Students are encouraged to affiliate with student chapters of various professional and technical organizations and societies.

ATHLETICS

Student athletic programs are offered through the Student Activities Office. Sports are offered based on student interest and the availability of faculty or student coaches. FTCC typically offers men's basketball, co-ed volleyball, men's and women's softball, and golf. Teams compete against other community colleges and in the Winston-Salem city leagues. All student activities in the West Campus gym must be supervised by FTCC personnel.

SPORTS PHILOSOPHY AND PURPOSE

The sports program is intended to provide students with a greater sense of effective community membership through competition with others. A sports program should serve as a laboratory of citizenship by inviting experimentation and learning in leadership, teamwork, strategy, and fair play.

STUDENT PUBLICATIONS

Technically Speaking is the student newsletter written and managed by a student staff. The newsletter, printed monthly and distributed on campus, provides registration information, a calendar of events, and brief articles about students and staff.

Published annually at the end of the spring quarter, FTCC *Collage* is a compilation of writing, original art, and photography from students and faculty/staff. Anyone affiliated with FTCC is encouraged to submit material for consideration.

STUDENT FINANCIAL SERVICES

PLEASE NOTE: All policies and regulations pertaining to federal and state aid are subject to change in order to meet regulations as changed by either the Department of Education or other federal entities.

Financial aid provides financial assistance to students who would otherwise be unable to continue their education. The financial need of a student is determined by the resources available to the student in relation to education. The college will make every effort within available financial aid resources to assist eligible students who lack the financial means to obtain a college education. Although the student and the student's parents are expected to make reasonable sacrifices to meet college expenses, financial assistance may be available to a student in the form of federal and state grants, scholarships, workstudy, and loans. Student who realize they will not be able to meet college expenses must take the early initiative in seeking information regarding financial assistance.

Students applying for financial aid must complete and mail the Free Application for Federal Student Aid (FAFSA). Information and applications may be obtained from the Office of Student Financial Services. Applications must be filed annually. The FAFSA is available January 1 of each year for the following academic year. The student will receive a Student Aid Report (SAR), which must be submitted to the Office of Student Financial Services. At that time, the office will inform the student of all needed documentation relevant to the completion of the student's financial aid file.

It is recommended that applications for federal student aid and other aid at FTCC be submitted not later than March 1 preceding fall quarter enrollment at the college. Funding for many programs is limited. Late applications after July 1 may find funds are obligated.

Financial aid will not be awarded to any student until all admissions requirements are met.

Students enrolled in the following curriculums/programs are not eligible for financial assistance:

Certificate in Customer Service
Certificate in Imaging Technology Computerized Tomography
Certificate in Imaging Technology - MRI
Certificate in Microcomputer Systems Technology
Certificate in Real Estate.
Pretechnical
Special Credit

ELIGIBILITY FOR AID

Most awards are based on financial need. This is determined by subtracting the Estimated Family Contribution (EFC) from a student's educational costs. Other requirements may be established by the agency or individual making the funds available.

The student has an obligation to maintain the Satisfactory Academic Progress Requirements as defined by the U.S. Department of Education and this institution specifically for financial aid recipients. Each financial aid recipient is provided a copy of the policy upon notification of award. A copy of the requirements can be obtained in the Office of Student Financial Services. Failure to maintain academic progress will result in the termination of financial assistance. Eligibility may be regained by reestablishing progress.

Financial aid recipients must notify the Office of Student Financial Services of any change in enrollment status of study change.

DISBURSEMENT OF AID

Students approved to receive financial assistance will receive an award letter detailing the types and amounts of aid awarded. Awards are made for the academic year, which is 33 weeks in length.

All financial aid recipients are notified in writing of registration procedures and are provided a disbursement schedule of all funds for the academic year.

Vocational curriculums and programs that do not lead to an associate's degree are subject to the federal regulation of clock/credit hour conversion. Therefore, students may find their award amount has been adjusted to meet the guidelines. All awarded students affected by this regulation are notified in writing prior to entry.

REFUND POLICY - FINANCIAL AID

Recipients of Federal Pell Grant funds who find it necessary to withdraw before attending classes will have their tuition refunded to the Federal Pell Grant account. If the recipient has attended classes but withdraws prior to the 20 percent point of the quarter, 75 percent of the tuition charged to the Federal Pell Grant account will be refunded.

Students who are attending Forsyth Technical Community College in a curriculum for the first time and who are eligible to receive Federal Pell Grant funds will be subject to the statutory prorated refund policy. Tuition, fees, and textbooks charged for a first-time student will be refunded to the Federal Pell Grant account based on the week of the quarter that the student withdraws up to the 60 percent point of the quarter.

GRANTS

FEDERAL PELL GRANTS

The Federal Pell Grant program is a federal aid program designed to provide financial assistance to those who need it to attend post-high school educational institutions. Students may apply by completing the Free Application for Federal Student Aid. Applications may be obtained at the Student Financial Services Office. Students should allow at least six weeks for processing.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT

The Federal Supplemental Educational Opportunity Grant (FSEOG) is funded by the federal government and is awarded to the neediest students who are Federal Pell Grant eligible and demonstrate a low family contribution.

FEDERAL WORKSTUDY PROGRAM

The Federal Workstudy program is a federally supported program through which students, primarily from low income families, are given preference for part-time employment (generally up to 20 hours per week). Students must be enrolled at least half-time to apply for workstudy and maintain satisfactory academic progress.

NORTH CAROLINA STUDENT INCENTIVE GRANT(NCSIG)

The NCSIG is a state program administered by College Foundation, Inc. from state and federal funds provided through the State Education Assistance Authority for students who demonstrate substantial financial need. It is open to North Carolina residents attending FTCC full-time and who apply by March 15.

LOANS

Student Financial Services maintains a file on sources of financial aid for students. Loans at a low rate of interest are available through the following agencies:

The Federal Stafford Student Loan Program
North Carolina Student Loan Program - Health, Science, and Mathematics
Sloan S. Sherrill Nursing Loan Fund
Winston-Salem Foundation (Available to Forsyth County residents only)

NORTH CAROLINA NURSE EDUCATION SCHOLARSHIP/LOAN PROGRAM (NESLP)

This scholarship loan was designed to address the shortage of trainee nurses practicing in North Carolina. Loans are available for study in nurse education programs located in North Carolina that lead to a degree (ADN) or a diploma (PN). Funding is contingent upon appropriations by the General Assembly of North Carolina. All scholarship loans made under the NESLP are based on demonstrated financial need. Contact the director of Student Financial Services for more information.

NURSING SCHOLARS PROGRAM (NSP)

The Nursing Scholars Program is a competitive scholarship loan. Financial need is not a criterion. An eleven-member Nursing Scholars Commission was created by the General Assembly of North Carolina to develop the selection criteria, the method of selection, and to select recipients on a statewide basis.

Students interested in learning more about the Nursing Scholars Program can contact either the State Education Assistance Authority or contact the director of Student Financial Services between January 1 and April 20. The deadline for submitting applications to the state is usually May 1 of each year.

FEDERAL FAMILY EDUCATION LOAN PROGRAM (FFELP)

Students who wish to be provided with more information regarding the Federal Family Education Loan, Supplemental Loan, and/or the PLUS (Loans for Parents) programs are advised to contact Student Financial Services.

SLOAN S. SHERRILL NURSING LOAN FUND

The Sherrill Nursing Loan is an interest-free loan made through FTCC for second-year Associate Degree Nursing students. For more information and applications, students should contact Student Financial Services by May preceding the academic year for which a loan is requested.

SCHOLARSHIPS

Students are encouraged to contact Student Financial Services for additional information and application criteria for the scholarships listed below. Listed are only the scholarships programs which are renewed yearly.

The R. D. Boyer Scholarship Fund is awarded annually, based on financial need, to a student pursuing a career in construction occupations.

The Carolina Telephone and Telegraph Scholarship is awarded annually to two students. Priority is given to unemployed and/or minority students.

The Corn Products Scholarship is awarded annually to students entering the second year of a business-related curriculum. The scholarship is for Forsyth County residents only and is based on academic ability and financial need.

The Don Angell Nursing Scholarship is awarded annually to an ADN or PN student. Priority is given to an employee of Angell Care, Inc.

The Mary Kate Dixon/Garden Study Club Scholarship is awarded annually to an outstanding student entering the second year of the Horticulture Technology curriculum.

The Forsyth County Medical Auxiliary awards scholarships to students entering the Associate Degree Nursing and allied health curriculums. The awarding of these scholarships is not controlled by FTCC.

The Forsyth Technical Community College Bookstore Endowment Scholarship awards academic scholarships for certain curriculumss as well as providing tuition assistance and emergency funds for those students deemed as demonstrating financial need by the Office of Student Financial Services. All awards are based on available funds.

The Norman Gaddis Scholarship is sponsored by the Student Government Association. It is primarily an emergency scholarship for students eligible for financial aid when funds are not available from other sources.

The Sandra Johnson Memorial Scholarship is awarded annually to an outstanding student entering the second year of Administrative Office Technology.

The 1990 Student Government Association/Tom Mayerchak Scholarship is awarded annually to a deserving student entering the second year of a technical or College Transfer curriculum. The program also awards three need-based scholarships, and provides funds for emergency use.

The Marshall Paul Johnston Scholarship is a perpetual scholarship available to Automotive Mechanics students.

The Winston-Salem Kiwanis and the Twin City Kiwanis Clubs award scholarships annually to graduating high school seniors. The scholarships are not controlled by the college.

The Mary B. Lauerman Memorial Scholarship is awarded annually to the full-time student with the highest cumulative GPA entering the second year of Associate Degree Nursing.

The Randall R. Jones Scholarship is awarded quarterly to the Machinist student with the highest GPA.

The National Tooling and Machining Scholarship is awarded at the beginning of the third, fifth, and seventh quarters to the full-time evening machinist student with the highest GPA at the beginning of each of the three quarters.

The Modern Machine Scholarship is awarded annually to a deserving student in the Welding curriculum and is based on academics and need.

The Jane Gaither Murray Scholarship is awarded annually to a deserving student entering the Associate Degree Nursing curriculum.

The North Carolina Community College Scholarship is awarded annually with priority given to unemployed and/or minority students.

The Lynne Breedlove O'Rourke Memorial Scholarship is awarded annually to an outstanding student entering the second year of the Radiologic Technology curriculum.

The Mr. and Mrs. Henry F. Snyder, Sr. Scholarship is used primarily as an emergency scholarship for students eligible for financial aid when funds are not available from other sources.

The Southern Bell Telephone Scholarship is awarded annually to two full-time students. Priority is given to applicants with the highest financial need and applicants whose job skills have become obsolete due to economic recession.

The Wachovia Technical Scholarship is awarded annually to three students who are enrolled full-time in the second year of a technical curriculum and is based on need and scholastic promise.

The Lettie Pate Whitehead Foundation Scholarship is awarded annually to nursing and allied health students who have demonstrated need through the Office of Student Financial Services. Awards are made as long as funds are available.

The Louise G. Wilson Scholarship is available to poverty-level Forsyth County residents who are accepted or enrolled in the vocational or technical curriculums.

PLEASE NOTE: In addition to the scholarships listed above, there are various individuals and organizations who contribute money yearly for scholarships to needy students. Most of the money available is not restricted; however, some of the scholarships are restricted to individuals enrolled in specific curriculums. Contact Student Financial Services for specific information regarding all federal, state, and local funds.

OTHER SOURCES OF AID

Other sources of aid not administered by FTCC are available for eligible students. Interested students should apply with the appropriate agency. Student Financial Services can assist the students in making the initial contact with the sources listed below:

North Carolina Veterans Affairs Scholarships
North Carolina Vocational Rehabilitation
North Carolina National Guard Tuition Assistance Plan
Job Training Partnership Act (JPTA)
Dependency and Indemnity Compensation (VA)
Winston-Salem Foundation

VETERANS BENEFITS

FTCC is approved for the training of persons eligible for benefits administered by the Veterans Administration (VA).

The Admissions Office will help applicants select a program of study and explain the procedures for enrolling in FTCC. Admissions will require application forms, testing, and the receipt and evaluation of transcripts for all prior training.

The enrollment certificate will not be submitted to the DVA Regional Office until the new student registers for courses. Educational benefits authorized by the Department of Veterans Affairs will be paid directly to the veteran after starting classes. Tuition, books and fees must be paid by the veteran upon registration. FTCC cannot postpone the payment of fees until veterans receive payments of their educational benefits.

Veterans are responsible for being familiar with the information found in the *Student Handbook, College Catalog,* and all veterans brochures and information obtained in the Student Financial Services Office.

Hours of Pay

Veterans benefit payments are issued monthly and are based on training for a prescribed number of hours.

Enrollees in two-year technical curriculums are classified according to the number of credit hours per quarter.

Full time	12 or more credit hours
3/4 time	9-11 credit hours
1/2 time	6-8 credit hours

Enrollees in one-year vocational curriculums are classified according to the number of weekly contact hours per quarter.

Full time	a minimum of 22 contact hours
3/4 time	a minimum of 16 contact hours
1/2 time	a minimum of 11 contact hours

Standards of Progress

Federal regulations require that students receiving veterans benefits must maintain standards of academic progress and conduct.

Satisfactory Academic Progress

The Academic Standing section of the *Student Handbook* describes the basic academic requirements for all students. A 2.0 cumulative GPA must be maintained and a probationary period of not more than one quarter is permitted. Progress is reviewed on a quarterly basis and performance in the major subject areas and preparatory/refresher classes is considered as well.

If a veteran or eligible person is classified as making unsatisfactory progress, a report will be submitted to the Veterans Administration and benefits will be terminated. Termination will take place effective with the posting of grades at the end of the probationary quarter. Recertification will not be made until satisfactory progress has been established by the veteran's regaining a 2.0 cumulative GPA. Students must request recertification to the director of Student Financial Services following the quarter in which satisfactory progress has been reached.

Satisfactory Conduct

Conduct in accordance with the section on Student Conduct and Responsibilities is expected of all students. Dismissal of veterans or eligible persons for unsatisfactory conduct will be reported to the Veterans Administration and benefits will be terminated.

Satisfactory Attendance

All students are expected to maintain satisfactory attendance as defined in the section on attendance. Eligible persons dropped from courses for nonattendance, poor attendance, or those who withdraw, will be terminated or have their hours reduced effective with the last day present in class. Unless special circumstances are involved, the Veterans Administration may determine this termination or reduction to be an overpayment retroactive to the beginning of the quarter.

Punitive/Nonpunitive Grades

Federal regulations prohibit payment for grades that do not count as progress toward graduation. Audits are not payable. A grade of WF is punitive because it counts as an F in GPA computations. A grade of W or WP is nonpunitive. If an eligible person receives a grade which reduces training time, a report is submitted to the Veterans Administration. In the case of punitive grades, the effective date of adjustment is the last day present in class. In the case of nonpunitive grades, the effective dates of adjustment will be an overpayment retroactive to the beginning of the quarter, unless special circumstances are involved.

Adult Continuing Education

ADULT CONTINUING EDUCATION

The Adult Continuing Education Division of FTCC provides appropriate, economical, and convenient learning opportunities for those citizens who are 18 years old or older. The opportunities are based on individual need and previous educational achievement. They range from the basic skills through high school and extend into vocational, technical, and general adult continuing education. Training is available to all adults who wish to learn and can benefit from the instruction provided.

The Adult Continuing Education Division provides a balanced educational program that encompasses a wide variety of course offerings that will meet the educational needs of employed and unemployed adults. The specific areas include Adult Basic Education, Adult High School Diploma Program, Occupational Trade Courses, New and Expanding Industry, Management Development, Academic, Avocational and Practical Skills, Compensatory Education, and English as a Second Language. New programs and/or courses are periodically developed when needs become apparent.

The primary goal of the Adult Continuing Education Division is to provide quality adult continuing education courses in convenient locations at a low cost for the citizens of Forsyth and Stokes counties.

The general program objectives are:

1. To provide expanded educational opportunities for those adults who would not otherwise continue their education.
2. To provide relatively inexpensive, convenient educational opportunities for adults regardless of educational background.
3. To provide programs of vocational/technical education for employed and unemployed adults who need training or retraining.
4. To provide short courses that will meet the general adult and community service needs of the people in the community.
5. To provide requested vocational and technical training programs for new and expanding industry in the FTCC service area.

GENERAL INFORMATION

Adult Continuing Education courses are scheduled quarterly. Preregistration is required for all courses and programs. Preregistration can be accomplished by calling or going to the Adult Continuing Education office located on the West

Campus at 1300 Bolton Street. Official registration takes place at the first class meeting. Registration is achieved by completing the necessary registration forms and paying the required fees. The Records Office keeps an official record of achievement for each student enrolled in Adult Continuing Education. Approximately 60 percent of the courses are taught on the FTCC main campus and on the West Campus. The remainder are taught at various locations in the community. Many courses meet during the day; however, approximately 70 percent of courses meet during the evening hours.

ADMISSIONS REQUIREMENTS

All persons who take Adult Continuing Education courses must be 18 years old or older. However, high school juniors and seniors may enroll provided they have advance approval from the school system. Everyone is required to preregister in order to take a continuing education course.

COST

A registration fee is required for all Adult Continuing Education courses except Human Resource Development, Adult Basic Education, English As A Second Language, GED, Adult High School, and Compensatory Education. Some courses have additional supply fee charges. Volunteer firemen, fire department personnel, volunteer rescue and lifesaving department personnel, local law enforcement officers, and persons 65 or older are exempt from paying the registration fees unless they enroll in a self-support class. In self-support courses, all students must pay the registration fee.

CEU CREDITS

Most Adult Continuing Education courses that meet for ten or more contact hours are approved for Continuing Education Units. CEU credit is based upon the number of hours a course is scheduled to meet. One CEU is awarded for every ten hours, and any portion thereof, a person attends class. (For example, a course that meets for 22 hours awards 2.2 CEUs.)

OCCUPATIONAL EXTENSION PROGRAMS

The Occupational Extension programs and courses are designed to provide an opportunity for working adults to gain or to improve vocational/technical skills. The programs also serve the business and industrial community by upgrading the skills of employees.

The Occupational Extension Programs include:

1. **Management Development Training** - designed to train or upgrade supervisors, potential supervisors, small business owners, and management trainees in business and industry.
2. **Vocational/Technical Courses** - designed to upgrade skills and knowledge in certain occupational and technical trades. These courses also provide many adults with an opportunity to gain new skills.
3. **Fire Service Training** - designed to provide practical training in all areas of fire fighting, to assist new volunteer fire departments in training personnel, and to provide upgrade training for the personnel of existing volunteer fire departments and local professional fire departments.

4. **Seminars and Workshops** - designed to provide specialized training for particular groups.
5. **Law Enforcement Training** - designed to train personnel in basic law enforcement and to provide upgrade training for those currently employed in the profession.
6. **New and Expanding Industry Training** - designed to train individuals in specific skill areas for jobs created by new or expanding industries.
7. **Health-Related Training** - designed to provide upgrade training to persons who are employed in health professions and prepare persons to become employed in health-related areas.
8. **Teacher Certificate Renewal Courses** - designed to offer alternatives for NC Certified Teachers to renew professional certification. All courses offered have prior approval from the NC Department of Public Instruction.

MANAGEMENT DEVELOPMENT TRAINING

Management Development Training (MDT) is an educational program designed to upgrade the competency of supervisory and mid-management personnel in business and industry. Classes are scheduled in accordance with the needs of industry. Students will receive a certificate upon completion of each course.

There are no prerequisites for entry into this program. There are a variety of courses scheduled to meet one night per week for eleven (11) weeks.

Listed below are course descriptions for some of the more popular Management Development Training courses:

Human Relations on the Job. This course is designed to improve communication skills through an understanding of basic temperament qualities, preconditioned behavior patterns, and a discussion of principles developed through transactional analysis. Students will be able to identify communication styles, ego states and learned behavior patterns and will be able to communicate effectively with each.

Principles of Management. This course involves the definition, function, history, purpose, and scope of management. Also covered in the class will be schools of thought in administration and management, the management process (planning, organizing, staffing, directing, controlling, coordinating, and decision making), tools of administration (authority and communication), and administrative responsibility.

Principles of Supervision. This course is designed for the person who is in a supervisory capacity. Subjects covered include fundamentals of supervision, relationships on the job, communications, training workers, performance evaluation, grievances and discipline, absenteeism, job management, managing time, encouraging self-improvement, human relations, and motivation.

Public Speaking. This course gives a basic understanding of the techniques needed to give a presentation and a chance to practice these techniques. Emphasis is on voice projection and getting ideas across. There is also discussion on ways to decrease fear of speaking before people, read the audience, and speak clearly, along with habits to avoid. All the techniques are discussed and each participant is given every opportunity to practice the new skills within the classroom setting.

Writing for Impact. This course allows students to participate in the composition and critique of key forms of written business communication in the areas of correspondence, reports and resumes. Included is a basic review of correct usage, with an emphasis on typical problem areas. Students develop a thorough grounding in both the study and practice of the writing process.

See Adult Continuing Education General Course Listings, published each quarter, for courses.

VOCATIONAL AND TECHNICAL COURSES

Courses in this program are occupationally oriented, providing adults with the opportunity to upgrade skills and knowledge in certain vocational and technical trades. This program includes upgrade training in such areas as electronics, health occupations, fire service training, and welding. It also gives the regular curriculum graduates of FTCC an opportunity to participate in a continuing education program after entering the world of work.

The following are course descriptions of some of the more popular vocational and technical extension courses:

Air Conditioning and Heating. The air conditioning and heating program consists of several courses, each course 44 hours per quarter: Air Conditioning Service I, Air Conditioning Service II, Refrigeration Service, Heating with Electricity, Gas and Oil, and Automotive Air Conditioning.

Auto Body Repair. Auto Body Repair I is an introduction to automobile construction, body repair, handtools, molding fasteners, and minor sheet metal repair procedures. Advanced students build knowledge and skills through hands-on priming and painting a car.

Auto Tune Up. This is a course for the car owner who would like to perform a minor engine tune-up without having to invest a lot of money for testing equipment. This course covers basic fundamentals of engine operation with emphasis placed on items such as distributors, ignition, timing, carburetors, etc.

Cabinet Making. These courses include power tools and production. Students learn how to use woodworking power equipment safely with hands-on small projects, and students actually build cabinets from drawings.

Computers and Word Processing. These 33-hour courses in computer fundamentals build skills in operating a computer using various software packages including DOS, LOTUS 123, Excel,Micro-Soft Works, and Word 4 Windows, etc. Hands-on practice is on IBM computers or compatibles.

Electronics. This course defines basic units, volts, amperes, ohms, etc. Also mathematical relationships as applied to electrical units & Ohm's law are covered. Electromagnetics and the operation of relays, motors, and generators (both AC and DC) are discussed. Students are introduced to electron theory and briefly how electron tubes and solid state devices operate. Students are shown how to use basic electrical/electronics measurement devices. No prerequisites.

Machine Shop Practices. Basic machine shop practices include the following: introduction to machine tools (drill press, lathe, milling machine, shaper, grinders, etc.), care and use of basic hand tools and measuring instruments, elementary layout and processes on lathe, drill press, and off-hand grinding of tools.

Mechanical Drafting & Sketching I. Instruction includes language of drawing, projections (orthographic, isometric, oblique), alphabet of lines, dimensioning and lettering, freehand sketching, and instrument drawing techniques.

Oil and Gas Burner Service. This course covers: oil burner fundamentals (operation, control, and service of oil burner systems), installing and servicing electric heating elements and their controls, principles of operating, installing, and servicing hot water and low pressure systems.

Small Engine Repair. In this one-quarter course, the student completely disassembles a one-cylinder engine in need of repair. The student furnishes the engine. The student makes necessary repairs or purchases necessary new parts and then reassembles the engine. At the end of the course, the student has a working rebuilt engine.

VCR Repair. In this course, students learn service techniques through classroom and hands-on practice.

Upholstery. In this course students learn the techniques of upholstery with hands-on practice. They learn to use heavy-duty sewing machines, staplers and glue guns while actually cutting, assembling fabric and fastening the fabric to furniture. Students supply their own furniture to be upholstered.

Welding. The welding program consists of courses in gas welding (oxyacetylene), electric welding (ARC), gas metal arc (MIG), inert gas (TIG) and pipe welding. All courses are taught with hands-on practice.

See Adult Continuing Education General Course Listings, published each quarter, for courses.

FIRE SERVICE TRAINING

Fire Service Training is designed to provide practical training in areas of fire prevention and firefighting. Courses are offered primarily to new volunteer fire department personnel. Upgrade training courses are provided for personnel who are already volunteers participating in fire departments and for professional fire fighters who are employed by the local professional fire departments. Fire Training Service courses are provided to professional and volunteer firemen free of charge.

Persons interested in further information regarding theses courses should call or go to the Adult Continuing Education Office, West Campus.

SEMINARS AND WORKSHOPS

Seminars and workshops are developed for the purpose of providing specialized training and educational programs for specific groups and organizations. Seminars and workshops have been conducted in the areas of hotel-motel management, energy conservation, cosmetology, occupational safety and health, and visual emission control.

LAW ENFORCEMENT TRAINING

Law enforcement education is primarily entrance-level training for public safety officers and the Forsyth County Sheriff's Department. This 580-hour course was established by the North Carolina Justice Academy and includes 35 law enforcement topics. It is a mandatory minimum standard for basic police training in North Carolina and is designed to provide the newly employed law enforcement officer with basic job knowledge, skills, and abilities to perform entry-level police work. The material includes constitutional law, the North Carolina Criminal and Motor Vehicle Law, traffic accident investigation and reporting, basic laws of arrest, search and seizure, evidence, patrol operation, firearms, and defensive tactics.

HEALTH-RELATED TRAINING PROGRAMS

Health-related training is designed to provide upgrade training to persons in the health professions and to assist persons in preparing themselves to become experienced in health-related areas. This training provides the student with entry-level job skills.

The courses are designed to upgrade as well as update knowledge and skills in specific areas. Courses are also offered to provide training for professionals who have not practiced in several years, enabling them to reenter their profession with competence.

Listed below are course descriptions for some of the popular health-related training courses:

CPR. This course teaches the proper and up-to-date techniques of cardiopulmonary resuscitation. It includes classroom and lab learning techniques. American Heart Association Certification is awarded to students upon satisfactory completion of this course.

CPR & Standard First Aid. The first four sessions of this class teach proper up-to-date techniques of cardiopulmonary resuscitation. The course includes classroom and lab learning techniques. Upon satisfactory completion of the CPR portion of the class, students are certified in CPR through the American Heart Association and may drop out if they choose. The last six sessions of the class are lecture/discussion on First Aid, with practical skill sessions. This portion is approved for teacher recertification credit.

Emergency Medical Technician (EMT). This course prepares professional and volunteer EMT personnel to take the state examination for certification. It is jointly sponsored by FTCC and the North Carolina Office of Emergency Medical Services. It is approximately 140 hours, including both classroom and lab instruction.

Licensed Practical Nurse (LPN) Refresher. This course prepares the LPN who has been out of nursing a number of years to go back to work with the necessary skills. There is a total of 90 classroom hours and 90 clinical training hours. The main areas of instruction include general medical and surgical nursing, experience with the functions of the LPN, and the LPN's relationship to the health team.

Medical Terminology. Students taking this course acquire a working knowledge of terms encountered in medicine. The course also orients the student to the use of reference books dealing with medical terminology.

Nursing Assistant I. This course prepares the graduate to provide personal care and perform basic nursing skills for the elderly and other adults. The course includes class, laboratory and clinical learning experiences. Upon satisfactory completion of the course the graduate is listed as a Nurse Aid I with the North Carolina Department of Human Resources Division of Facility Services.

Nursing Assistant II. This course prepares graduates to perform more complex skills for patients or residents regardless of the setting. Emphasis is on infection control, elimination procedures, intravenous site care, established tracheostomy care, observation and maintenance of oxygen therapy and the role of Nursing Assistant II with members of the health care team.

Registered Nurse (RN) Refresher. This course is designed to prepare the RN who has been out of nursing for several years to return to work. It includes general medical and surgical nursing, new equipment, procedures, charting, documentation, medications, IV therapy, and physician's orders. Students are allowed to perform patient care under the direct supervision of an instructor.

Unit Secretary. This course prepares a person to work as a unit secretary in either a hospital or nursing home. The student is trained to keep and maintain clerical items for doctors and nurses to perform patient treatments. Some of the areas covered include medical and drug terminology, scheduling surgery and special procedures, telephone techniques, receptionist's duties, and the intercom.

See Adult Continuing Education General Course Listings, published each quarter, for courses.

BASIC SKILLS PROGRAMS

Adult High School Diploma Program

FTCC, in cooperation with the Winston-Salem/Forsyth County School System and the Stokes County School System, offers day and evening courses for high school credit to adult students who wish to obtain an adult high school diploma. Courses are taught at FTCC West Campus and South Stokes High School.

Adults take courses needed to satisfy NC high school graduation requirements. Students may carry as many as four courses per quarter. A passing score on the high school competency test is required for graduation. The program is designed for adults 18 years old or older. Enrollment by 16-and 17-year-olds may be allowed if they have been out of school for at least 6 months and were not suspended or expelled from school as the result of a disciplinary action.

Information regarding eligibility, courses needed for graduation, and registration for classes can be obtained from the Admissions Office at FTCC or the West Campus. There is no registration fee; however, students must furnish their own books and supplies.

Adult Basic Skills Program

The Adult Basic Skills program provides education for the adult whose inability to perform basic reading, writing, and math skills makes it difficult for them to find jobs or remain in their present jobs.

The primary objectives of the program are:

1. to enable these adults to become less dependent on others.
2. to enhance their ability to benefit from other occupational training.
3. to increase their opportunities for better and more rewarding jobs.
4. to make them better able to meet their adult responsibilities.

Adult Basic Education classes are held at various locations throughout Forsyth and Stokes counties. Classes are conducted during the day and evening hours. No fees are charged to the student, and some books and materials are supplied free of charge.

Compensatory Education Program

The Compensatory Education program provides educational opportunities that enable persons with mental handicaps resulting from developmental or environmental causes to function in society at a level which will allow them to reach their full potential and maintain mastered skills. Areas within the program of study are:

1. Language
2. Math
3. Social Science
4. Community Living
5. Health
6. Consumer Education
7. Vocational Education

Compensatory Education classes are held at various locations in Forsyth and Stokes counties as well as on the FTCC West Campus. No fees are charged to the student, and books and materials are supplied free of charge.

English as a second language (ESL)

The ESL program provides instruction for foreign-born adults who have limited English proficiency. Students may attend four levels of classes to aquire skills in listening, speaking, reading, writing, and comprehension of the English language, and acculturation to the society of the United States. No registration fee.

General Education Development (GED)

The Tests of General Educational Development, developed by the American Council of Education for persons who have not graduated from high school, are designed to measure, as nearly as possible, the skills and concepts generally associated with four years of regular high school instruction.

Using a multiple-choice question format for each of the five tests (Writing Skills, Social Studies, Science, Interpreting Literature and the Arts, and Mathematics), as well as an essay for Writing Skills, the test battery corresponds to the general framework of most high school curriculums. The context of items attempts to measure skills relevant to adult experience, rather than the ability to remember facts, details, or precise definitions.

All fifty states, the District of Columbia, U.S. territories, ten Canadian provinces and territories, and several foreign countries use results from the GED tests as a basis for issuing high school credentials. These diplomas are official documents that are nearly always accepted as valid credentials by employers and directors of training programs. In addition, all community colleges and some four-year colleges and universities have admissions policies that permit GED test score reports to be accepted in lieu of complete high school transcripts.

Upon successful completion of the GED tests, a high school diploma equivalency is issued by the North Carolina Community College System. FTCC is one of the 83 official GED testing centers in the state and is the only one in Forsyth County.

FTCC offers GED Preparation classes at selected sites throughout Forsyth and Stokes counties. The GED tests are given by appointment only at FTCC's West Campus to adults 18 years old or older. There is a $7.50 fee for taking the GED test.

HRD (Human Resources Development)

The HRD program provides short-term prevocational training and counseling designed to help unemployed and underemployed adults successfully enter the workforce or further training. HRD has proven to be an effective means of reducing welfare payments, unemployment and underemployment by preparing recipients to further their aim toward employment and self-sufficiency.

HRD program staff are responsible for recruitment, classroom training, career counseling, assisting students into a job or further training and providing one year follow-up services to program graduates. The program structure and instructional content are developed to achieve this aim. Classes are free and interested persons may contact the HRD coordinator on the west campus.

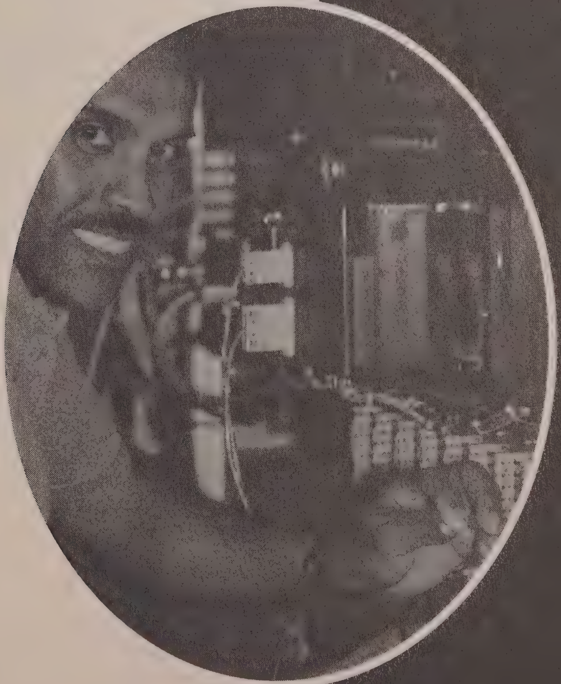
COMMUNITY SERVICE PROGRAMS

The Community Service programs are designed to provide courses, seminars, and activities that (1) contribute to the community's overall cultural, civic and intellectual growth; and (2) assist adults in the development of new skills or the upgrading of existing ones in their avocational, academic, and practical skills areas of interest.

The Community Service programs include:

1. **Academic Extension Courses** - designed to serve the academic needs of adult citizens, including courses in humanities, mathematics and science, and social sciences. Some classes that fall in this category: foreign languages, investments, stock market, sign language, creative writing.
2. **Practical Skills Courses** - designed to provide practical training for persons pursuing additional skills which are not considered their major or primary vocation, but may supplement income or may lead to employment. Some classes that fall in this category: Chinese cooking, quiltmaking, sewing, window treatments, woodcarving, picture framing and matting.
3. **Avocational Courses -** designed to focus on an individual's personal or leisure needs rather than their occupation, profession, or employment. Some classes that fall in this category: drawing, painting, crafts, photography, piano, stained glass, pottery.

Associate in Applied Science Degree Curriculums



ASSOCIATE IN APPLIED SCIENCE DEGREE CURRICULUMS

CURRICULUM DESCRIPTION

The curriculums described on the following pages are technical in nature. Upon completion of a curriculum, the graduate will be awarded the associate in applied science degree. This degree is recognized nationally to indicate the successful completion of two years of education beyond the high school level.

The listing of courses for each curriculum is shown in the proper sequence; consequently, applicants should plan to attend 21 or 24 consecutive months.

The College's purpose is to offer the technical courses which will prepare the graduate for immediate employment opportunities. Therefore, the ability to transfer to other institutions of higher education, and to transfer credit earned, will be determined by the receiving institution.

SAMPLE COURSE LISTING

			C	L	P	QH
BUS	102	Keyboarding	3	2	0	4
			3	2	0	4

KEY TO SAMPLE COURSE LISTING

BUS ....Course Prefix

102 ....Course Number

Keyboarding ....Course Title

C
3 . . .Number of Classroom Hours Per Week

L
2 . . .Number of Laboratory Hours Per Week

P
or CE
0 ....Number of Practicum Per Week
(Practical application or clinical
experience per week)

QH
4 ....Number of Quarter Hours Credit

3 2 0 4 ....Total Number of
Contact Hours Per Week

ACCOUNTING T-016

CURRICULUM DESCRIPTION

The purpose of the Accounting curriculum is to prepare the individual to enter the accounting profession through study of accounting principles, theories and practices with related study in law, finance, management and data processing operations.

The curriculum is designed to prepare the individual for entry-level accounting positions such as junior accountant, bookkeeper, accounting clerk, cost clerk, payroll clerk and related data processing occupations.

With experience and additional education, the individual will be able to advance to positions such as systems accountant, cost accountant, budget accountant and property accountant.

JOB OPPORTUNITIES

ENTRY LEVEL
Accountant
Estimator
Bookkeeper I
Bookkeeping-Machine Operator I
Accounting Clerk

ADVANCED LEVEL
Budget Accountant
Cost Accountant
Property Accountant
Systems Accountant
Bookkeeper II
Bookkeeping-Machine Operator II

CURRICULUM BY QUARTERS:

Course Title			**Hours Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
BUS	102	Keyboarding	3	2	0	4
MAT	119	Principles of Mathematics	5	0	0	5
BUS	120	Accounting I	4	0	3	5
ENG	100	Oral Communication	3	0	0	3
			15	**2**	**3**	**17**
SECOND QUARTER						
BUS	121	Accounting II	4	0	3	5
ECO	149	Macroeconomics	5	0	0	5
EDP	101	Principles of Business Data Processing	3	2	0	4
ENG	101	Introduction to Written Communication	3	0	0	3
			15	**2**	**3**	**17**
THIRD QUARTER						
BUS	122	Accounting III	4	0	3	5
BUS	210	Business Statistics	5	0	0	5
BUS	229	Taxes	2	0	3	3
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
ENG	102	Composition	3	0	0	3
			17	**0**	**6**	**19**
FOURTH QUARTER						
BUS	109	Business Mathematics	5	0	0	5
BUS	115	Business Law I	3	0	0	3
BUS	221	Intermediate Accounting I	5	0	0	5
BUS	230	Advanced Taxes	2	0	3	3
			15	**0**	**3**	**16**
FIFTH QUARTER						
BUS	116	Business Law II	3	0	0	3
BUS	222	Intermediate Accounting II	5	0	0	5
BUS	280	Microcomputer Accounting Applications: General Ledger	3	0	0	3
EDP	152	Financial Spreadsheet Operations I	3	0	0	3
ENG	205	Report Writing	3	0	0	3
			17	**0**	**0**	**17**
SIXTH QUARTER						
BUS	225	Managerial Cost Accounting I	3	2	0	4
BUS	227	Intermediate Accounting III	5	0	0	5
BUS	269	Auditing I	3	2	0	4
ENG	115	Appreciation of Literature	3	0	0	3
			14	**4**	**0**	**16**
SEVENTH QUARTER						
BUS	224	Advanced Accounting	3	2	0	4
BUS	226	Managerial Cost Accounting II	3	2	0	4
BUS	270	Auditing II	3	2	0	4
PSY	101	Psychology	3	0	0	3
			12	**6**	**0**	**15**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 118

ADMINISTRATIVE OFFICE TECHNOLOGY T-030

CURRICULUM DESCRIPTION

This curriculum prepares individuals to perform secretarial and administrative support duties in a variety of offices including those offices with computerized, automated functions.

Students in this curriculum study keyboarding and word/information processing to develop skills in the preparation of business correspondence, reports, statistical copy, manuscripts and business forms. Administrative support courses emphasize typical office tasks such as scheduling appointments, composing correspondence and performing reprographic duties. Training is also provided in analyzing and coordinating office duties and systems. Skills and knowledge are taught in the areas of electronic document storage and retrieval and computer software utilization.

Graduates of the curriculum may be employed in offices in private business establishments involved in retailing, marketing, advertising, and manufacturing as well as offices in local, state, and federal government.

JOB OPPORTUNITIES

ENTRY LEVEL
Secretary
Data Typist
Typist
Office Clerk
Word Processing Correspondence Specialist
Word Processing Typist
Word Processing Administrative Secretary
Receptionist

ADVANCED LEVEL
Administrative Secretary
Transcribing Operator Supervisor
Word Processing Supervisor

CURRICULUM BY QUARTERS

Course Title	**Hours Per Week**			
	C	**L**	**P**	**QH**
FIRST QUARTER				
BUS 102 Keyboarding	3	2	0	4
BUS 128 Personal Financial Management	5	0	0	5
EDP 103 Introduction to Microcomputing DOS	3	0	0	3
ENG 100 Oral Communication	3	0	0	3
MAT 119 Principles of Mathematics	5	0	0	5
	19	**2**	**0**	**20**
SECOND QUARTER				
BUS 103 Document Formatting	3	2	0	4
BUS 109 Business Mathematics	5	0	0	5
BUS 113 Vocabulary/Terminology I	3	0	0	3
BUS 250 Word Processing/ WordPerfect	1	4	0	3
ENG 101 Introduction to Written Communication	3	0	0	3
	15	**6**	**0**	**18**
THIRD QUARTER				
BUS 104 Document Production/ Word Processing	3	2	0	4
BUS 114 Vocabulary/Terminology II	3	0	0	3
BUS 115 Business Law I	3	0	0	3
ENG 102 Composition	3	0	0	3
PSY 101 Psychology	3	0	0	3
	15	**2**	**0**	**16**
FOURTH QUARTER				
BUS 105 Advanced Word Processing Applications	3	2	0	4
BUS 112 Machine Transcription I	3	2	0	4
BUS 211 Proofreading and Filing	2	0	3	3
ENG 205 Report Writing	3	0	0	3
	11	**4**	**3**	**14**
FIFTH QUARTER				
BUS 120 Accounting I	4	0	3	5
BUS 212 Machine Transcription II	3	2	0	4
EDP 101 Principles of Business Data Processing	3	2	0	4
EDP 150 Data Base Management Systems I	3	0	0	3
ENG 115 Appreciation of Literature	3	0	0	3
	16	**4**	**3**	**19**
SIXTH QUARTER				
BUS 121 Accounting II	4	0	3	5
BUS 215 Machine Transcription III	3	2	0	4
BUS 214 Administrative Office Procedures	5	0	0	5
BUS 240 Word Processing/Word	2	0	3	3
	14	**2**	**6**	**17**
SEVENTH QUARTER				
BUS 280 Microcomputer Accounting Applications: General Ledger	3	0	0	3
BUS 272 Principles of Supervision	3	0	0	3
EDP 152 Financial Spreadsheet Operations I	3	0	0	3
EDP 173 Desktop Publishing I	3	0	0	3
	12	**0**	**0**	**12**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 117

ARCHITECTURAL TECHNOLOGY T-041

CURRICULUM DESCRIPTION

The Architectural Technology curriculum provides individuals with knowledge and skills that will lead to employment and advancement in the field of architectural technology. Technical courses are included which will enable the graduate to advance into related areas of work as job experience is obtained or to continue toward an advanced degree in an associated field of technology.

Architectural technicians translate the architect's design sketches into complete and accurate plans and drawings for construction purposes. The technician will be involved in work requiring a knowledge of drafting, construction materials, mechanical and structural systems, estimating, building codes, and specifications.

Initial employment opportunities exist with architectural and engineering firms, private utilities, contractors, and municipal governments.

JOB OPPORTUNITIES

Architectural and Construction-Related Drafting Technician
Building Code Inspector
Estimator
Field Inspector (Buildings)
Construction Supervisor
Delineator
Model Builder
Building Materials Sales Representative

CURRICULUM BY QUARTERS

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
ARC 104	Architectural Materials and Methods I	2	0	0	2
ARC 106	Architectural Drafting I	2	0	6	4
ARC 181	History of Architecture and Construction	3	0	0	3
ENG 100	Oral Communication	3	0	0	3
MAT 101	Technical Mathematics I	5	0	0	5
		15	**0**	**6**	**17**
SECOND QUARTER					
ARC 105	Architectural Materials and Methods II	3	0	0	3
ARC 107	Architectural Drafting II	2	0	6	4
CAD 151	Introduction to AutoCAD	2	2	0	3
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 102	Technical Mathematics II	5	0	0	5
		15	**2**	**6**	**18**
THIRD QUARTER					
ARC 108	Architectural Drafting III	0	0	9	3
ARC 109	Architectural Mechanical Equipment	3	0	3	4
CAD 152	Computer-Aided Drafting I	1	0	3	2
MAT 103	Technical Mathematics III	5	0	0	5
PHY 111	Physics - Mechanics	3	2	0	4
		12	**2**	**15**	**18**
FOURTH QUARTER					
ARC 150	Site Planning	2	0	6	4
ARC 160	Elementary Structures of Architects and Builders	5	0	0	5
ARC 170	Presentation Drawing and Model Making	2	0	6	4
ARC 190	Building Codes and Zoning Ordinances	2	0	6	4
CAD 153	Computer-Aided Drafting II	2	2	0	3
		13	**2**	**18**	**20**
FIFTH QUARTER					
ARC 219	Architectural Portfolio	2	4	0	4
ARC 220	Architectural Drafting IV	2	0	9	5
CAD 154	Computer-Aided Drafting III	1	2	0	2
ENG 102	Composition	3	0	0	3
PSY 101	Psychology	3	0	0	3
		11	**6**	**9**	**17**
SIXTH QUARTER					
ARC 221	Architectural Drafting V	2	0	9	5
ARC 235	Codes, Specifications, and Contract Documents	3	0	3	4
CAD 155	Computer-Aided Drafting Applications	1	4	0	3
ENG 103	Technical Report Writing	3	0	0	3
		9	**4**	**12**	**15**
SEVENTH QUARTER					
ARC 222	Architectural Drafting VI	2	0	9	5
ARC 236	Construction Estimating and Field Inspecting	3	0	3	4
ENG 115	Appreciation of Literature	3	0	0	3
PHY 114	Physics - Light and Sound	3	2	0	4
		11	**2**	**12**	**16**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 122

ASSOCIATE DEGREE NURSING T-059

CURRICULUM DESCRIPTION

The Associate Degree Nursing curriculum is designed to prepare graduates to assess, analyze, plan, implement and evaluate nursing care. The graduate is eligible to apply to take the National Council Licensure Examination (NCLEX-RN), which is required for practice as a registered nurse.

Individuals desiring a career in registered nursing should take biology, algebra and chemistry courses prior to entering the program.

The registered nurse may be employed in a wide variety of health care settings such as hospitals, long-term care facilities, clinics, physician's offices, industry and community health agencies.

JOB OPPORTUNITIES

Registered Nurse

CURRICULUM BY QUARTERS

Course	Title	Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
BIO 107	Anatomy and Physiology I	3	2	0	4
NUR 111	Foundations of Nursing Practice	4	2	6	7
NUR 105	Introduction to Pharmacology	2	0	0	2
		9	**4**	**6**	**13**
SECOND QUARTER					
BIO 108	Anatomy and Physiology II	3	2	0	4
NUR 121	Adult Health Nursing I	4	0	12	8
PSY 101	Psychology	3	0	0	3
		10	**2**	**12**	**15**
THIRD QUARTER					
BIO 169	Fundamentals of Disease Processes	4	0	0	4
NUR 131	Adult Health Nursing II	4	2	12	9
PSY 110	Lifespan Psychology	3	0	0	3
		11	**2**	**12**	**16**
FOURTH QUARTER					
ENG 100	Oral Communications	3	0	0	3
NUR 141	Adult Health Nursing III	5	0	12	9
PSY 111	Abnormal Behavior	3	0	0	3
SOC 103	Sociology	3	0	0	3
		14	**0**	**12**	**18**
FIFTH QUARTER					
ENG 101	Introduction to Written Communication	3	0	0	3
NUR 251	Mental Health Nursing (1/2 quarter)	6	0	12	5
NUR 252	Nursing Care of the Older Adult (1/2 quarter)	6	0	12	5
	or				
NUR 253	Perinatal Nursing (1/2 quarter)	6	0	12	5
NUR 254	Nursing of Children (1/2 quarter)	6	0	12	5
	Elective	3	0	0	3
		9	**0**	**12**	**16**
SIXTH QUARTER					
EDP 102	Microcomputer Concepts	3	0	0	3
NUR 251	Mental Health Nursing (1/2 quarter)	6	0	12	5
NUR 252	Nursing Care of the Older Adult (1/2 quarter)	6	0	12	5
	or				
NUR 253	Perinatal Nursing (1/2 quarter)	6	0	12	5
NUR 254	Nursing of Children (1/2 quarter)	6	0	12	5
		9	**0**	**12**	**13**
SEVENTH QUARTER					
ENG 115	Appreciation of Literature	3	0	0	3
NUR 271	Advanced Health Nursing	6	0	15	11
		9	**0**	**15**	**14**

FTCC ADN applicants MUST complete 1 unit each of high school algebra, biology, and chemistry prior to admission to the program. Chemistry MUST be taken within the past 5 years.

TOTAL CREDIT HOURS: 105

AUTOMATION/ROBOTICS TECHNOLOGY T-173

CURRICULUM DESCRIPTION

The Automation/Robotics curriculum is designed to prepare technicians to install, program, operate, maintain, service and repair automated manufacturing systems, including robots.

The course of study will include fundamentals of mechanical, electrical, and electronic technology with specific application of robots, controlling devices, and electromechanical equipment in automated manufacturing systems.

The graduate of this curriculum will be prepared for employment in industries that utilize robots and other electromechanical devices in automated manufacturing.

JOB OPPORTUNITIES

Electromechanical Technician
Automation Technician
Automation/Robotics Technician
Manufacturing Systems Technician

CURRICULUM BY QUARTERS

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
CET 105	Computer Tools for Engineering Technology I	0	0	3	1
ELC 101	Fundamentals of Electricity I	5	0	6	7
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 101	Technical Mathematics I	5	0	0	5
		13	**0**	**9**	**16**
SECOND QUARTER					
CET 106	Computer Tools for Engineering Technology II	0	0	3	1
ELC 102	Fundamentals of Electricity II	5	0	6	7
ENG 102	Composition	3	0	0	3
MAT 102	Technical Mathematics II	5	0	0	5
		13	**0**	**9**	**16**
THIRD QUARTER					
ELN 110	Transistor Applications	5	2	6	8
ENG 103	Technical Report Writing	3	0	0	3
MAT 103	Technical Mathematics III	5	0	0	5
PHY 111	Physics - Mechanics	3	2	0	4
		16	**4**	**6**	**20**
FOURTH QUARTER					
DFT 112	Drafting - Electromechanical	3	2	0	4
ELM 200	Mechanisms	3	0	3	4
ELN 210	Linear Integrated Circuits	5	2	6	8
PHY 112	Physics - Materials and Heat	3	2	0	4
		14	**6**	**9**	**20**
FIFTH QUARTER					
ELM 210	Electromechanical Devices	4	0	6	6
ELM 215	Electrical Control Systems	5	0	6	7
ENG 115	Appreciation of Literature	3	0	0	3
		12	**0**	**12**	**16**
SIXTH QUARTER					
ELM 220	Automatic Control Systems I	4	0	3	5
ELN 219	Digital Fundamentals	5	0	6	7
MEC 230	Hydraulics and Pneumatics	3	2	0	4
PSY 101	Psychology	3	0	0	3
		15	**2**	**9**	**19**
SEVENTH QUARTER					
ECO 102	Economics I	3	0	0	3
ELM 230	Automatic Control Systems II	5	0	3	6
ELM 240	Electromechanical Troubleshooting	3	0	3	4
ELN 225	Computers and Microprocessors	4	0	6	6
		15	**0**	**12**	**19**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 127

BANKING AND FINANCE T-112

CURRICULUM DESCRIPTION

The purposes of the Banking and Finance curriculum are (1) to prepare the individual to enter the banking and finance industry, (2) to provide an educational program for the banking employees wanting to receive the American Institute of Banking certificate, and (3) to provide an educational program to upgrade or retrain individuals presently employed in the banking or finance industry.

These purposes will be fulfilled through study in areas such as banking and finance principles, theories and practices; teller operations; lending and collections procedures; financial analysis; marketing; and public relations.

This curriculum will provide the opportunity for an individual to enter a variety of banking or finance jobs in retail banks, commercial banks, government lending agencies, mortgage banks, and credit companies.

JOB OPPORTUNITIES

Entry Level
Advanced Level
Accounting Clerk
Branch Manager
Teller
Departmental Manager, Advertising
General Clerk
Departmental Manager, Budget
Collector and Adjuster
Departmental Manager, Personnel and Training
Banking Staff Assistant

CURRICULUM BY QUARTERS

Course Title			**Hours Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
AIB	202	Principles of Banking	4	0	0	4
BUS	102	Keyboarding	3	2	0	4
ENG	100	Oral Communication	3	0	0	3
MAT	119	Principles of Mathematics	5	0	0	5
			15	**2**	**0**	**16**
SECOND QUARTER						
AIB	209	Installment Credit	4	0	0	4
BUS	109	Business Mathematics	5	0	0	5
BUS	120	Accounting I	4	0	3	5
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
ENG	101	Introduction to Written Communication	3	0	0	3
			19	**0**	**3**	**20**
THIRD QUARTER						
AIB	236	Trust Functions and Services	4	0	0	4
BUS	115	Business Law I	3	0	0	3
BUS	121	Accounting II	4	0	3	5
ECO	102	Economics I	3	0	0	3
ENG	102	Composition	3	0	0	3
			17	**0**	**3**	**18**
FOURTH QUARTER						
AIB	231	Financial Markets and Institutions	4	0	0	4
BUS	116	Business Law II	3	0	0	3
BUS	122	Accounting III	4	0	3	5
ECO	104	Economics II	3	0	0	3
			14	**0**	**3**	**15**
FIFTH QUARTER						
AIB	205	Bank Management	4	0	0	4
BUS	128	Personal Financial Management	5	0	0	5
ENG	205	Report Writing	3	0	0	3
PSY	101	Psychology	3	0	0	3
			15	**0**	**0**	**15**
SIXTH QUARTER						
AIB	203	Bank Investments	4	0	0	4
BUS	209	Real Estate Finance	5	0	0	5
BUS	229	Taxes	2	0	3	3
ENG	115	Appreciation of Literature	3	0	0	3
			14	**0**	**3**	**15**
SEVENTH QUARTER						
AIB	235	Loan and Discount	3	0	0	3
AIB	239	Marketing for Bankers	4	0	0	4
BUS	210	Business Statistics	5	0	0	5
BUS	272	Principles of Supervision	3	0	0	3
BUS		Elective	3	0	0	3
			18	**0**	**0**	**18**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 118

BUSINESS ADMINISTRATION T-018

CURRICULUM DESCRIPTION

The Business Administration curriculum is designed to prepare an individual for entry into middle-management occupations in various businesses and industries. The curriculum provides an overview of the business and industrial world -- its organization and management.

The purpose of the curriculum will be fulfilled through courses designed to develop competency in (1) understanding the principles of organization and management in business operations, (2) utilizing modern techniques to make decisions, (3) understanding the economy through study and analysis of the role of production and marketing, (4) communicating orally and in writing, and (5) interpersonal relationships.

Through these skills and through development of personal competencies and qualities, the individual will be able to function effectively in middle-management activities in business or industry.

JOB OPPORTUNITIES

ENTRY LEVEL
Purchasing Agent
Sales Manager
Public Relations Representative
Sales-Service Promoter
Training Representative
General Supervisor
Credit Card Operations Manager
Operations Officer
Loan Officer
Volunteer Services Supervisor
Customer Services Manager
Residence Supervisor

ADVANCED LEVEL
Personnel Manager
Credit and Collection Manager
Customer Service Manager
Branch Manager
Production Superintendent
Traffic Manager
Credit Union Manager
Housing Project Manager
Market Manager
Loan Counselor
Office Manager
Department Manager
Warehouse Manager

CURRICULUM BY QUARTERS

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
BUS	101	Introduction to Business	5	0	0	5
BUS	102	Keyboarding	3	2	0	4
ENG	100	Oral Communication	3	0	0	3
MAT	119	Principles of Mathematics	5	0	0	5
			16	**2**	**0**	**17**
SECOND QUARTER						
BUS	109	Business Mathematics	5	0	0	5
BUS	120	Accounting I	4	0	3	5
ECO	102	Economics I	3	0	0	3
ENG	101	Intro to Written Communication	3	0	0	3
			15	**0**	**3**	**16**
THIRD QUARTER						
BUS	115	Business Law I	3	0	0	3
BUS	121	Accounting II	4	0	3	5
ECO	104	Economics II	3	0	0	3
EDP	101	Principles of Business Data Processing	3	2	0	4
ENG	102	Composition	3	0	0	3
			16	**2**	**3**	**18**
FOURTH QUARTER						
BUS	116	Business Law II	3	0	0	3
BUS	122	Accounting III	4	0	3	5
BUS	229	Taxes	2	0	3	3
BUS	239	Marketing	5	0	0	5
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
			17	**0**	**6**	**19**
FIFTH QUARTER						
BUS	128	Personal Financial Management	5	0	0	5
BUS	232	Sales Development	3	0	0	3
ENG	205	Report Writing	3	0	0	3
PSY	101	Psychology	3	0	0	3
			14	**0**	**0**	**14**
SIXTH QUARTER						
BUS	245	Advertising Using Desktop Graphics	3	2	0	4
BUS	280	Microcomputing Accounting Applications: General Ledger	3	0	0	3
EDP	152	Financial Spreadsheet Operations I	3	0	0	3
ENG	115	Appreciation of Literature	3	0	0	3
BUS		Elective	3	0	0	3
			15	**2**	**0**	**16**
SEVENTH QUARTER						
BUS	235	Business Management	5	0	0	5
BUS	272	Principles of Supervision	3	0	0	3
BUS		Electives	6	0	0	6
			14	**0**	**0**	**14**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 115

BUSINESS COMPUTER PROGRAMMING T-022

CURRICULUM DESCRIPTION

The primary objective of the Business Computer Programming curriculum is to prepare individuals for gainful employment as computer programmers. The objective is fulfilled through study and application in areas such as computer and systems theories and concepts, data processing techniques, business operations, logic, programming procedures and languages, and types, uses and operation of equipment.

Entry-level jobs as computer programmer and computer programmer trainee are available. With experience and additional education, the individual may enter jobs such as data processing manager, computer programmer manager, systems analyst and systems manager.

JOB OPPORTUNITIES

ENTRY LEVEL
Computer Programmer
Computer Programmer Trainee
Information Systems Programmer
Process Control Programmer
Detail Programmer

ADVANCED LEVEL
Data Processing Manager/Supervisor
Computer Operations Manager/Supervisor
Chief Business Programmer
Data Processing Programmer/Analyst

CURRICULUM BY QUARTERS

Course Title	**Hours Per Week**			
	C	L	P	QH
FIRST QUARTER				
MAT 119 Principles of Mathematics	5	0	0	5
EDP 100 Introduction to Data Processing	3	2	0	4
EDP 107 Logic and Decision Making I	3	0	0	3
EDP 140 BASIC Language Programming I	3	2	0	4
	14	**4**	**0**	**16**
SECOND QUARTER				
EDP 105 Assembler Language Programming I	5	2	0	6
EDP 108 Logic and Decision Making II	3	0	0	3
ENG 100 Oral Communication	3	0	0	3
MAT 117 EDP Mathematics	5	0	0	5
	16	**2**	**0**	**17**
THIRD QUARTER				
BUS 120 Accounting I	4	0	3	5
BUS 210 Business Statistics	5	0	0	5
EDP 110 COBOL Programming I	3	2	0	4
ENG 101 Introduction to Written Communication	3	0	0	3
	15	**2**	**3**	**17**
FOURTH QUARTER				
BUS 121 Accounting II	4	0	3	5
EDP 111 COBOL Programming II	3	2	0	4
EDP 210 Mainframe Computer Operating Systems	3	2	0	4
EDP 245 UNIX Operating System	3	2	0	4
	13	**6**	**3**	**17**
FIFTH QUARTER				
EDP 202 Minicomputer Operating Systems	3	2	0	4
EDP 205 Systems Analysis and Design	3	2	0	4
EDP 270 RPG III Programming I	3	2	0	4
ENG 102 Composition	3	0	0	3
PSY 101 Psychology	3	0	0	3
	15	**6**	**0**	**18**
SIXTH QUARTER				
EDP 106 Assembler Language Programming II	3	2	0	4
EDP 242 C Programming Language	3	2	0	4
EDP 271 RPG III Programming II	3	2	0	4
ENG 115 Appreciation of Literature	3	0	0	3
	12	**6**	**0**	**15**
SEVENTH QUARTER				
EDP 208 Advanced Programming	3	2	0	4
EDP 220 Research Project	3	2	0	4
EDP 260 EDP Microcomputing	3	2	0	4
ENG 205 Report Writing	3	0	0	3
	12	**6**	**0**	**15**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 116

COMPUTER ENGINEERING TECHNOLOGY T-040

CURRICULUM DESCRIPTION

The Computer Engineering Technology curriculum is intended to provide the skills required to install, service and maintain computers, microprocessor- and computer- controlled equipment and computer peripheral devices.

The curriculum provides training in both the hardware and software areas of the computer field.

A sequence of introductory hardware courses provides the student with a strong background in physics, technical mathematics, electricity, electronics, and digital logic circuits and concepts. Advanced course work provides a detailed study of the logic of the central processing unit, the operation of integrated circuits in the central processing unit, the operation and use of integrated circuit memory devices and the interfacing of the central processing unit to memory devices. Additional studies cover interfacing the central processing unit to external devices using both serial and parallel data transfer, the operation of large scale integration programmable interface units and their interfacing with the central processing unit, and the operation of computer peripheral devices such as video displays, printers, floppy disk storage systems, magnetic tape units, keyboards and the techniques of converting signal between the analog and digital forms.

The programming course work provides a sequence of study stressing good program design techniques, structured programming and program documentation. Rather than being familiar with a large number of programming languages, the student is expected to learn well a highly structured language, such as Pascal, and an assembly language. The importance of assembly language to the understanding of the operation of the central processing unit and the related computer units is stressed. Computer operating system concepts are discussed to provide a unified view of the hardware and software aspects of the computer system.

JOB OPPORTUNITIES

Computer Service Technician
Electronic Computer Mechanic
Electronic Systems Mechanic

CURRICULUM BY QUARTERS

Course Title	**Hours Per Week**			
	C	L	P	QH
FIRST QUARTER				
CET 105 Computer Tools for Engineering Technology I	0	0	3	1
ELC 101 Fundamentals of Electricity I	5	0	6	7
ENG 100 Oral Communication	3	0	0	3
MAT 101 Technical Mathematics I	5	0	0	5
	13	**0**	**9**	**16**
SECOND QUARTER				
CET 106 Computer Tools for Engineering Technology II	0	0	3	1
ELC 102 Fundamentals of Electricity II	5	0	6	7
ENG 101 Introduction to Written Communication	3	0	0	3
MAT 102 Technical Mathematics II	5	0	0	5
	13	**0**	**9**	**16**
THIRD QUARTER				
ELN 110 Transistor Applications	5	2	6	8
ENG 102 Composition	3	0	0	3
MAT 103 Technical Mathematics III	5	0	0	5
PHY 111 Physics - Mechanics	3	2	0	4
	16	**4**	**6**	**20**
FOURTH QUARTER				
CET 160 Assembly Language Programming	3	0	3	4
ELN 210 Linear Integrated Circuits	5	2	6	8
ELN 219 Digital Fundamentals	5	0	6	7
	13	**2**	**15**	**19**
FIFTH QUARTER				
CET 200 Microprocessors	4	0	6	6
ELN 235 Industrial Electronics I	5	0	6	7
ENG 103 Technical Report Writing	3	0	0	3
PSY 101 Psychology	3	0	0	3
	15	**0**	**12**	**19**
SIXTH QUARTER				
CET 215 Mini-Computer Maintenance I	4	0	6	6
CET 220 Microprocessor Interfacing	4	0	6	6
PHY 114 Physics - Light and Sound	3	2	0	4
	11	**2**	**12**	**16**
SEVENTH QUARTER				
CET 225 Mini-Computer Maintenance II	4	0	6	6
CET 232 Computer Peripherals	4	0	6	6
CET 242 Concepts of Computer Networking and Data Communications	2	0	3	3
ENG 115 Appreciation of Literature	3	0	0	3
	13	**0**	**15**	**18**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 125

CRIMINAL JUSTICE
PROTECTIVE SERVICES TECHNOLOGY T-129

CURRICULUM DESCRIPTION

The Criminal Justice Technology curriculum is designed so that it may be a multi-faceted program of study. It consists of study options in corrections, law enforcement and security services.

The curriculum is designed with a core of courses to afford the student the opportunity to acquire basic knowledge, skills and attitudes in the generally accepted subject areas associated with a two-year study of correctional services, law enforcement and security services. It includes subjects such as interpersonal communication, law, psychology and sociology.

In addition to core subjects, the **correctional services option** provides an opportunity to study other generally accepted subjects indigenous to a two-year correctional services program such as confinement facility administration, correctional law, counseling, probation-parole services and rehabilitation options. Similarly, the **law enforcement option** provides an opportunity to study other generally accepted subjects included in a two-year law enforcement services program such as criminal behavior, criminal investigation, patrol operation, traffic management, and other aspects of law enforcement administration and operations. The **security services option** provides an opportunity to study other generally accepted subjects such as accident prevention and safety management, common carrier protection, fire prevention, private security, industrial security, retail security, security systems and surveillance.

Job opportunities are available with federal, state, county and municipal governments. In addition, knowledge, skills and attitudes acquired in this course of study qualify one for job opportunities with private enterprise in such areas as industrial, retail, and private security.

JOB OPPORTUNITIES - CORRECTIONS T129R

FEDERAL, STATE, AND LOCAL
Adult Probation/Parole
Juvenile Probation/Parole
Juvenile Services
Confinement
Confinement Facility Administration
Correctional Counseling
Correctional Program Development

CURRICULUM BY QUARTERS:

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
CJC 101	Intro. to Criminal Justice	5	0	0	5
CJC 102	Criminology	5	0	0	5
ENG 100	Oral Communication	3	0	0	3
SOC 102	General Sociology	5	0	0	5
		18	**0**	**0**	**18**
SECOND QUARTER					
CJC 103	Government - National	5	0	0	5
CJC 220	Criminal Justice Organization and Admin.	5	0	0	5
EDP 102	Microcomputer Concepts	3	0	0	3
ENG 101	Introduction to Written Communication	3	0	0	3
		16	**0**	**0**	**16**
THIRD QUARTER					
CHM 121	Forensic Chemistry I	3	2	0	4
CJC 104	Government - State and Local	5	0	0	5
CJC 120	Administration of Justice	4	0	0	4
CJC 252	Research in Criminal Justice	3	0	0	3
ENG 102	Composition	3	0	0	3
		18	**2**	**0**	**19**
FOURTH QUARTER					
CHM 122	Forensic Chemistry II	3	2	0	4
CJC 122	Criminal Justice Practicum	0	0	10	1
CJC 250	Criminal Personality and Behavior	5	0	0	5
CJC 251	Justice Issues and the Media	5	0	0	5
	Elective	3	0	0	3
		16	**2**	**10**	**18**
FIFTH QUARTER					
CJC 105	Introduction to Corrections	5	0	0	5
CJC 230	Correctional Counseling	3	0	0	3
CJC 232	Multicultural Relations in Criminal Justice	3	0	0	3
ENG 103	Technical Report Writing	3	0	0	3
MAT 115	Fundamental Concepts of Algebra	3	0	0	3
		17	**0**	**0**	**17**
SIXTH QUARTER					
CJC 209	Correctional Law	5	0	0	5
CJC 233	Penology and Correctional Literature	5	0	0	5
CJC 260	Ethics in Criminal Justice	3	0	0	3
SOC 211	Victimology	3	0	0	3
		16	**0**	**0**	**16**
SEVENTH QUARTER					
CJC 234	Case Management	3	0	0	3
ENG 115	Appreciation of Literature	3	0	0	3
MAT 116	Fundamental Concepts of Statistics	5	0	0	5
PSY 102	General Psychology	5	0	0	5
		16	**0**	**0**	**16**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of three (3) credit hours in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 123

JOB OPPORTUNITIES - LAW ENFORCEMENT T129L

Alcohol Enforcement Officer
College or University Officer
Correctional Officer
Correctional Programs Assistant
Deputy Sheriff
Investigator
Highway Patrolman
Police Officer
Park Security Officer
Private Security Officer
Retail Security Officer
Wildlife Enforcement Officer

CURRICULUM BY QUARTERS

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
CJC 101 Intro. to Criminal Justice	5	0	0	5
CJC 102 Criminology	5	0	0	5
ENG 100 Oral Communication	3	0	0	3
SOC 102 General Sociology	5	0	0	5
	18	**0**	**0**	**18**
SECOND QUARTER				
CJC 103 Government - National	5	0	0	5
CJC 220 Criminal Justice Organization and Admin.	5	0	0	5
EDP 102 Microcomputer Concepts	3	0	0	3
ENG 101 Introduction to Written Communication	3	0	0	3
	16	**0**	**0**	**16**
THIRD QUARTER				
CHM 121 Forensic Chemistry I	3	2	0	4
CJC 104 Government - State and Local	5	0	0	5
CJC 120 Administration of Justice	4	0	0	4
CJC 252 Research in Criminal Justice	3	0	0	3
ENG 102 Composition	3	0	0	3
	18	**2**	**0**	**19**
FOURTH QUARTER				
CHM 122 Forensic Chemistry II	3	2	0	4
CJC 122 Criminal Justice Practicum	0	0	10	1
CJC 250 Criminal Personality and Behavior	5	0	0	5
CJC 251 Justice Issues and the Media	5	0	0	5
	13	**2**	**10**	**15**
FIFTH QUARTER				
CJC 105 Introduction to Corrections	5	0	0	5
CJC 117 Constitutional Law	3	0	0	3
CJC 232 Multicultural Relations in Criminal Justice	3	0	0	3
ENG 103 Technical Report Writing	3	0	0	3
MAT 115 Fundamental Concepts of Algebra	3	0	0	3
	17	**0**	**0**	**17**
SIXTH QUARTER				
CJC 115 Criminal Law	5	0	0	5
CJC 210 Criminalistics I	3	2	0	4
CJC 260 Ethics in Criminal Justice	3	0	0	3
SOC 211 Victimology	3	0	0	3
Elective	3	0	0	3
	17	**2**	**0**	**18**
SEVENTH QUARTER				
CJC 211 Criminalistics II	3	2	0	4
ENG 115 Appreciation of Literature	3	0	0	3
MAT 116 Fundamental Concepts of Statistics	5	0	0	5
PSY 102 General Psychology	5	0	0	5
	16	**2**	**0**	**17**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of three (3) credit hours in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 123

JOB OPPORTUNITIES - PRIVATE PROTECTIVE SERVICES T129P

PRIVATE ENTERPRISE
Industrial Security and Loss Prevention
Private Security
Retail Security and Loss Prevention
Corporate VIP Security
Insurance Fraud Investigation

CURRICULUM BY QUARTERS

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
CJC 101 Intro. to Criminal Justice	5	0	0	5
CJC 102 Criminology	5	0	0	5
ENG 100 Oral Communication	3	0	0	3
SOC 102 General Sociology	5	0	0	5
	18	**0**	**0**	**18**
SECOND QUARTER				
CJC 103 Government - National	5	0	0	5
CJC 220 Criminal Justice Organization and Admin.	5	0	0	5
EDP 102 Microcomputer Concepts	3	0	0	3
ENG 101 Introduction to Written Communication	3	0	0	3
	16	**0**	**0**	**16**
THIRD QUARTER				
CHM 121 Forensic Chemistry I	3	2	0	4
CJC 104 Government - State and Local	5	0	0	5
CJC 120 Administration of Justice	4	0	0	4
ENG 102 Composition	3	0	0	3
	15	**2**	**0**	**16**
FOURTH QUARTER				
CHM 122 Forensic Chemistry II	3	2	0	4
CJC 122 Criminal Justice Practicum	0	0	10	1
CJC 250 Criminal Personality and Behavior	5	0	0	5
CJC 251 Justice Issues and the Media	5	0	0	5
Elective	3	0	0	3
	16	**2**	**10**	**18**
FIFTH QUARTER				
CJC 241 Introduction to Security	5	0	0	5
CJC 244 Retail Security and Loss Prevention	5	0	0	5
ENG 103 Technical Report Writing	3	0	0	3
MAT 115 Fundamental Concepts of Algebra	3	0	0	3
	16	**0**	**0**	**16**
SIXTH QUARTER				
CJC 242 Safety and Risk Management	5	0	0	5
CJC 252 Research in Criminal Justice	5	0	0	5
CJC 260 Ethics in Criminal Justice	3	0	0	3
MAT 116 Fundamental Concepts of Statistics	3	0	0	3
SOC 211 Victimology	3	0	0	3
	19	**0**	**0**	**19**
SEVENTH QUARTER				
CJC 243 Law for Protective Service	5	0	0	5
CJC 245 Industrial Security and Loss Prevention	5	0	0	5
ENG 115 Appreciation of Literature	3	0	0	3
PSY 102 General Psychology	5	0	0	5
	18	**0**	**0**	**18**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of three (3) credit hours in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 124

DRAFTING AND DESIGN ENGINEERING TECHNOLOGY T-043

CURRICULUM DESCRIPTION

The Drafting and Design Engineering Technology curriculum prepares technicians for drafting and/or designing mechanical parts, mechanisms and mechanical systems.

Emphasis is placed on developing the student's ability to think and plan as well as on the development of drafting and design skills. Computer-Aided Drafting (CAD) and conventional equipment will be used to produce drawings such as sectional views, subassemblies and major components of machinery and mechanical systems.

Coursework includes the study of technical drafting and design, materials, applied mechanics, mechanical systems, manufacturing methods, manufacturing processes, applied physics, technical mathematics, descriptive geometry, computer applications, and written and oral communications.

Drafting and design technicians are employed in many types of manufacturing, fabrication, research and development, and service industries.

JOB OPPORTUNITIES

Mechanical Design Technician
Mechanical Drafter
Tool Design Drafter
CAD Drafter/Designer
Detail Drafter

CURRICULUM BY QUARTERS

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
CAD 151 Introduction to AutoCAD	2	2	0	3
CET 105 Computer Tools for Engineering Technology I	0	0	3	1
DFT 101 Technical Drafting I	1	0	3	2
ENG 101 Introduction to Written Communication	3	0	0	3
MAT 101 Technical Mathematics I	5	0	0	5
MEC 101 Machine Processes I	1	0	6	3
	12	**2**	**12**	**17**
SECOND QUARTER				
CAD 152 Computer-Aided Drafting I	1	0	3	2
DFT 102 Technical Drafting II	1	0	3	2
ENG 102 Composition	3	0	0	3
MAT 102 Technical Mathematics II	5	0	0	5
MEC 102 Machine Processes II	1	0	6	3
PHY 111 Physics - Mechanics	3	2	0	4
	14	**2**	**12**	**19**
THIRD QUARTER				
CET 106 Computer Tools for Engineering Technology II	0	0	3	1
DFT 103 Technical Drafting III	1	0	3	2
ENG 103 Technical Report Writing	3	0	0	3
MAT 103 Technical Mathematics III	5	0	0	5
MEC 201 Manufacturing Processes I	1	0	6	3
PHY 112 Physics - Materials and Heat	3	2	0	4
	13	**2**	**12**	**18**
FOURTH QUARTER				
CAD 153 Computer-Aided Drafting II	2	2	0	3
DFT 205 Design Drafting I	1	0	3	2
MEC 104 Applied Mechanics	5	0	0	5
MEC 210 Ferrous Metallurgy	3	0	3	4
MEC 235 Fluid Power	3	0	3	4
	14	**2**	**9**	**18**
FIFTH QUARTER				
CAD 154 Computer-Aided Drafting III	1	2	0	2
DFT 204 Descriptive Geometry	2	0	3	3
DFT 206 Design Drafting II	1	0	3	2
DFT 260 Geometric Dimensioning and Tolerancing	1	0	3	2
MEC 205 Strength of Materials	3	2	0	4
PHY 113 Physics - Electricity	3	2	0	4
	11	**6**	**9**	**17**
SIXTH QUARTER				
DFT 211 Mechanisms	3	0	3	4
DFT 223 Design Drafting III	2	0	6	4
ENG 100 Oral Communication	3	0	0	3
MEC 237 Control Systems	3	2	0	4
PSY 101 Psychology	3	0	0	3
	14	**2**	**9**	**18**
SEVENTH QUARTER				
DFT 212 Jig and Fixture Design	2	0	6	4
DFT 224 Product Design	2	0	6	4
ENG 115 Appreciation of Literature	3	0	0	3
ISC 212 Engineering Economic Analysis	2	2	0	3
	9	**2**	**12**	**14**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 122

EARLY CHILDHOOD ASSOCIATE T-073

CURRICULUM DESCRIPTION

The Early Childhood Associate curriculum prepares individuals to work with programs and/or centers concerned with the care and development of infants and young children. Through study and application in such areas as child growth and development, physical and nutritional needs of children, care and guidance of children, and communication with children and their parents, individuals will be able to function effectively in various programs and/or centers dealing with preschool children.

Job opportunities are available in such areas as day care centers, nursery schools, kindergartens, child development centers, hospitals, rehabilitation clinics, evaluation clinics, camps, and recreational centers.

JOB OPPORTUNITIES

ENTRY LEVEL
Child Care Worker
Day Care Worker
Child Care Assistant
Professional Nanny

ADVANCED LEVEL
Director, Day Care
Director, Preschool

CURRICULUM BY QUARTERS

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
EDU 101	Child Growth and Development	6	0	0	6
ENG 100	Oral Communication	3	0	0	3
HEA 102	Personal Health	5	0	0	5
SOC 103	Sociology	3	0	0	3
		17	**0**	**0**	**17**
SECOND QUARTER					
EDU 102	Programs for Young Children	3	2	0	4
EDU 107	Communication with Young Children	2	0	0	2
EDU 111	Infant Toddler Development and Activities	3	0	0	3
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 118	General Mathematics	3	0	0	3
SOC 105	Families in the American Culture	3	0	0	3
		17	**2**	**0**	**18**
THIRD QUARTER					
EDU 103	Working with Young Children	3	0	10	4
ENG 102	Composition	3	0	0	3
HEA 113	Health and Safety for Young Children	3	0	0	3
SCI 101	General Science	3	0	0	3
		12	**0**	**10**	**13**
FOURTH QUARTER					
EDU 104	Art for Young Children	3	0	0	3
	OR				
EDU 116	Child Care Credential II	3	0	0	3
EDU 108	Social Studies in Early Childhood	3	0	0	3
EDU 110	Instructional Media and Resources	2	0	3	3
EDU 112	Language Arts in Early Childhood	3	0	0	3
	OR				
EDU 115	Child Care Credential I	3	0	0	3
ENG 207	Educational Report Writing	3	0	0	3
		14	**0**	**3**	**15**
FIFTH QUARTER					
EDU 105	Music and Creative Movement for Young Children	3	0	0	3
EDU 106	Activities for Young Children: Science and Math	5	0	10	6
ENG 116	Children's Literature	3	0	0	3
PSY 102	General Psychology	5	0	0	5
		16	**0**	**10**	**17**
SIXTH QUARTER					
EDU 109	Physical Activities: Games for Young Children	1	2	0	2
EDU 202	Curriculum Development and Planning	4	0	10	5
EDU 203	The Exceptional Child	3	0	0	3
PSY 205	Child Psychology	3	0	0	3
		11	**2**	**10**	**13**
SEVENTH QUARTER					
EDU 204	Parent Education	3	0	0	3
EDU 211	Early Childhood Internship	4	0	20	6
EDU 271	Child Care Administration	3	0	0	3
SAF 101	First Aid and CPR	1	2	0	2
		11	**2**	**20**	**14**
ELECTIVES					
EDU 230	Issues in Early Childhood: Discipline	1	0	0	1
EDU 233	Issues in Early Childhood: Infant Feeding	1	0	0	1
EDU 234	Issues in Early Childhood: Child Abuse and Neglect	1	0	0	1
EDU 235	Issues in Early Childhood: School Age Child Care	1	0	0	1
		4	**0**	**0**	**4**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of three (3) credit hours in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 114

ELECTRONICS ENGINEERING TECHNOLOGY T-045

CURRICULUM DESCRIPTION

The Electronics Engineering Technology curriculum provides a basic background in electronics-related theory, with practical applications of electronics for business and industry. Courses are designed to develop competent electronics technicians who may work as assistants to engineers or as liaisons between engineers and skilled craftspersons.

The electronics technician will start in one or more of the following areas: research, design, development, production, maintenance, or sales. The graduate may begin as an electronics technician, an engineering aide, laboratory technician, supervisor, or equipment specialist.

JOB OPPORTUNITIES

Electronics Technician
Electrical Tester
Electronics Engineering Technician
Electronics Mechanic
Electronics Sales and Service Technician

CURRICULUM BY QUARTERS

Course Title			**Hours Per Week**			
			C	L	P	QH
FIRST QUARTER						
CET	105	Computer Tools for Engineering Technology I	0	0	3	1
ELC	101	Fundamentals of Electricity I	5	0	6	7
ENG	100	Oral Communication	3	0	0	3
MAT	101	Technical Mathematics I	5	0	0	5
			13	**0**	**9**	**16**
SECOND QUARTER						
CET	106	Computer Tools for Engineering Technology II	0	0	3	1
ELC	102	Fundamentals of Electricity II	5	0	6	7
ENG	101	Introduction to Written Communication	3	0	0	3
MAT	102	Technical Mathematics II	5	0	0	5
			13	**0**	**9**	**16**
THIRD QUARTER						
ELN	110	Transistor Applications	5	2	6	8
ENG	102	Composition	3	0	0	3
MAT	103	Technical Mathematics III	5	0	0	5
PHY	111	Physics - Mechanics	3	2	0	4
			16	**4**	**6**	**20**
FOURTH QUARTER						
ELN	210	Linear Integrated Circuits	5	2	6	8
MAT	201	Technical Mathematics IV	5	0	0	5
PHY	112	Physics - Materials and Heat	3	2	0	4
			13	**4**	**6**	**17**
FIFTH QUARTER						
ELN	219	Digital Fundamentals	5	0	6	7
ELN	235	Industrial Electronics I	5	0	6	7
ENG	103	Technical Report Writing	3	0	0	3
			13	**0**	**12**	**17**
SIXTH QUARTER						
ELN	236	Industrial Electronics II	4	0	6	6
ELN	247	Electronic Systems: Computers	4	0	6	6
PSY	101	Psychology	3	0	0	3
			11	**0**	**12**	**15**
SEVENTH QUARTER						
ENG	115	Appreciation of Literature	3	0	0	3
ELN	248	Microprocessor Interfacing	5	0	6	7
ELN	250	Networking Personal Computers	4	0	6	6
PHY	114	Physics - Light and Sound	3	2	0	4
			15	**2**	**12**	**20**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 122

ELECTRONICS ENGINEERING TECHNOLOGY T-045

Evening Curriculum

CURRICULUM DESCRIPTION

The Electronics Engineering Technology curriculum provides a basic background in electronics-related theory, with practical applications of electronics for business and industry. Courses are designed to develop competent electronics technicians who may work as assistants to engineers or as liaisons between engineers and skilled craftspersons.

The electronics technician will start in one or more of the following areas: research, design, development, production, maintenance, or sales. The graduate may begin as an electronics technician, an engineering aide, laboratory technician, supervisor, or equipment specialist.

JOB OPPORTUNITIES

Electronics Technician
Electrical Tester
Electronics Engineering Technician
Electronics Mechanic
Electronics Sales and Service Technician

CURRICULUM BY QUARTERS

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
CET 105	Computer Tools for Engineering Technology I	0	0	3	1
ELC 101	Fundamentals of Electricity I	5	0	6	7
MAT 101	Technical Mathematics I	5	0	0	5
		10	**0**	**9**	**13**
SECOND QUARTER					
CET 106	Computer Tools for Engineering Technology II	0	0	3	1
ELC 102	Fundamentals of Electricity II	5	0	6	7
MAT 102	Technical Mathematics II	5	0	0	5
		10	**0**	**9**	**13**
THIRD QUARTER					
ELN 110	Transistor Applications	5	2	6	8
MAT 103	Technical Mathematics III	5	0	0	5
		10	**2**	**6**	**13**
FOURTH QUARTER					
ELN 210	Linear Integrated Circuits	5	2	6	8
MAT 201	Technical Mathematics IV	5	0	0	5
		10	**2**	**6**	**13**
FIFTH QUARTER					
ELN 235	Industrial Electronics I	5	0	6	7
ENG 100	Oral Communication	3	0	0	3
PHY 111	Physics - Mechanics	3	2	0	4
		11	**2**	**6**	**14**
SIXTH QUARTER					
ELN 236	Industrial Electronics II	4	0	6	6
ENG 101	Introduction to Written Communication	3	0	0	3
PHY 112	Physics - Materials and Heat	3	2	0	4
		10	**2**	**6**	**13**
SEVENTH QUARTER					
ELN 219	Digital Fundamentals	5	0	6	7
PHY 114	Physics - Light and Sound	3	2	0	4
		8	**2**	**6**	**11**
EIGHTH QUARTER					
ELN 247	Electronic Systems: Computers	4	0	6	6
ENG 102	Composition	3	0	0	3
		7	**0**	**6**	**9**
NINTH QUARTER					
ELN 248	Microprocessor Interfacing	5	0	6	7
ENG 103	Technical Report Writing	3	0	0	3
PSY 101	Psychology	3	0	0	3
		11	**0**	**6**	**13**
TENTH QUARTER					
ELN 250	Networking Personal Computers	4	0	6	6
ENG 115	Appreciation of Literature	3	0	0	3
		7	**0**	**6**	**9**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 122

FILM AND VIDEO PRODUCTION TECHNOLOGY T-000

CURRICULUM DESCRIPTION

The Film and Video Production Technology curriculum is designed to prepare students for entry-level employment in production support and selected technical areas of film, video, and associated media production. Students completing this program have a number of career possibilities from which to choose as crew and/or production and post-production assistants in a variety of media forms.

The curriculum provides exposure to a broad range of entry-level technician and production crew positions. During the first part of the curriculum students receive a comprehensive introduction to a broad range of production tasks with emphasis on entry-level crew responsibilities. This provides a framework of basic skills and an overall understanding of the industry upon which to build the specific and focused second part of the program. During this portion of the curriculum students attend a series of intensive classes taught by master professionals using a non-traditional approach. These courses are reinforced by working on set and on location in production projects locally and throughout the state. The emphasis throughout the curriculum is on a hands-on, practical, job-oriented approach intended to duplicate the conditions students will experience upon entry into employment.

Graduates of the curriculum may find employment as entry-level crew and/or entry-level assistants in a variety of areas, including feature and short film productions along with video productions involving commercials, educational, industrial, and documentary programs as well as opportunities in other production and post-production areas such as multimedia and editing.

JOB OPPORTUNITIES

ENTRY LEVEL
Audio Visual Technician
Camera Assistant
Construction Assistant
Film/Video Editing Assistant
Grip
Lighting/Electrical Assistant
Location Scout
Wardrobe and Makeup Assistant
Multimedia Assistant
Non-Linear Editing Assistant
Production Assistant
Production Design Assistant
Property Assistant
Sound Assistant

CURRICULUM COURSES

The course listing for Film and Video Production Technology is under development and was not available at the time of printing. For additional information, call (910) 723-0371, Ext. 253.

HORTICULTURE TECHNOLOGY T-009

CURRICULUM DESCRIPTION

The Horticulture Technology curriculum encompasses the study and practical application of a variety of subjects in the field of horticulture. The curriculum consists of identifying and selecting plant materials; propagating, planting, and growing plants; designing basic landscapes and planting materials at the appropriate places and in the correct manner; properly maintaining plant materials; and managing the nursery, greenhouse, and garden center. In addition, skills are developed in designing and building planters, walks, patios, fences and other landscape features. The curriculum is designed to provide students with the knowledge, skills, and attitudes that are necessary for independent, creative thinking essential to success in this field.

Various types of employers hire the graduates of this curriculum. Examples are nurseries, greenhouse operations, garden centers, landscape contractors, landscape maintenance companies, and municipal governmental agencies.

JOB OPPORTUNITIES

ENTRY LEVEL
Landscape Worker
Nursery Worker
Plant Propagator
Tree Pruner
Groundskeeper
Greenhouse Worker
Salesperson, Horticultural
    and Nursery Products
Landscape Construction Worker
Garden Center Worker
Lawn Service Worker

ADVANCED LEVEL
Horticulture - Specialty
Grower, Field
Horticulture - Specialty
Grower, Inside
Landscape Gardener
Nursery Management
Greenhouse Superintendent
Landscape Drafter

CURRICULUM BY QUARTERS

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
ENG	100	Oral Communication	3	0	0	3
HOR	150	Interior Plant	3	0	0	3
HOR	170	Plant Science	4	2	0	5
HOR	185	Soil Science and Fertilizer	5	2	0	6
			15	**4**	**0**	**17**
SECOND QUARTER						
ENG	101	Introduction to Written Communication	3	0	0	3
		Elective	3	0	0	3
HOR	153	Greenhouse Management	3	2	0	4
HOR	254	Plant Propagation	3	2	0	4
PSY	101	Psychology	3	0	0	3
			15	**4**	**0**	**17**
THIRD QUARTER						
ENG	102	Composition	3	0	0	3
HOR	140	Home Maintenance	2	4	0	4
HOR	151	Plant Identification I	3	4	0	5
HOR	180	Bedding Plant Production	2	2	0	3
HOR	201	Agriculture Chemicals	3	0	0	3
			13	**10**	**0**	**18**
FOURTH QUARTER						
HOR	145	Entomology and Pathology	4	2	0	5
HOR	152	Plant Identification II	3	4	0	5
HOR	240	Landscape Construction I	2	4	0	4
HOR	256	Nursery Management I	2	4	0	4
			11	**14**	**0**	**18**
FIFTH QUARTER						
ENG	103	Technical Report Writing	3	0	0	3
HOR	241	Landscape Construction II	4	2	0	5
HOR	251	Landscape Design I	3	4	0	5
HOR	258	Turf Practices	3	2	0	4
			13	**8**	**0**	**17**
SIXTH QUARTER						
ENG	115	Appreciation of Literature	3	0	0	3
HOR	252	Landscape Design II	3	4	0	5
HOR	257	Nursery Management II	2	4	0	4
MAT	119	Principles of Mathematics	5	0	0	5
			13	**8**	**0**	**17**
SEVENTH QUARTER						
HOR	200	Practicum	0	0	30	3
HOR	210	Field Analysis	5	0	0	5
HOR	220	Vegetable and Flower Gardening	4	0	0	4
			9	**0**	**30**	**12**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 117

MANUFACTURING ENGINEERING TECHNOLOGY T-050

CURRICULUM DESCRIPTION

The Manufacturing Engineering Technology curriculum prepares individuals for entry-level employment in planning, tooling, operating, servicing and supervising manufacturing operations. This curriculum provides a basic background in electro-mechanical theory, fluid power, industrial health and safety, and quality assurance. Students will gain knowledge and skills in basic manufacturing processes, and computer integrated manufacturing (CIM). Emphasis is placed on critical thinking, general education, familiarization with local industry, and the use of personal computers to perform business and engineering functions.

A graduate should qualify for employment in one of several manufacturing functions: methods analysis, work simplification and measurement, production scheduling, quality control and assurance, materials testing, facility layout and materials handling, machine tooling, sales, and filed applications for producers of industrial products and services.

JOB OPPORTUNITIES

Manufacturing Engineering Technician
Manufacturing Technician
Manufacturing Systems Technician
Quality Control Technician

CURRICULUM BY QUARTERS

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
CAD 151	Introduction to AutoCAD	2	2	0	3
CET 105	Computer Tools for Engineering Technology I	0	0	3	1
DFT 101	Technical Drafting I	1	0	3	2
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 101	Technical Mathematics I	5	0	0	5
MEC 101	Machine Processes I	1	0	6	3
		12	**2**	**12**	**17**
SECOND QUARTER					
CET 106	Computer Tools for Engineering Technology II	0	0	3	1
DFT 102	Technical Drafting II	1	0	3	2
ENG 102	Composition	3	0	0	3
MAT 102	Technical Mathematics II	5	0	0	5
MEC 102	Machine Processes II	1	0	6	3
PHY 111	Physics - Mechanics	3	2	0	4
		13	**2**	**12**	**18**
THIRD QUARTER					
ENG 103	Technical Report Writing	3	0	0	3
MAT 103	Technical Mathematics III	5	0	0	5
MEC 201	Manufacturing Processes I	1	0	6	3
PHY 112	Physics - Materials and Heat	3	2	0	4
		12	**2**	**6**	**15**
FOURTH QUARTER					
MEC 104	Applied Mechanics	5	0	0	5
MEC 180	Programming for Manufacturing	3	0	3	4
MEC 210	Ferrous Metallurgy	3	0	3	4
MEC 235	Fluid Power	3	0	3	4
		14	**0**	**9**	**17**
FIFTH QUARTER					
CHM 101	Chemistry	4	2	0	5
DFT 260	Geometric Dimensioning and Tolerancing	1	0	3	2
MEC 202	Manufacturing Processes II	2	0	6	4
MEC 205	Strength of Materials	3	2	0	4
PHY 113	Physics - Electricity	3	2	0	4
		13	**6**	**9**	**19**
SIXTH QUARTER					
ENG 100	Oral Communication	3	0	0	3
ISC 202	Quality Control	3	2	0	4
ISC 203	Motion and Time Study	3	2	0	4
MEC 237	Control Systems	3	2	0	4
PSY 101	Psychology	3	0	0	3
		15	**6**	**0**	**18**
SEVENTH QUARTER					
ENG 115	Appreciation of Literature	3	0	0	3
ISC 209	Plant Layout	3	2	0	4
ISC 212	Engineering Economic Analysis	2	2	0	3
MEC 203	Welding Processes	2	0	3	3
MEC 240	Introduction to Robotics and CIM	3	2	0	4
		13	**6**	**3**	**17**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 122

MARKETING AND RETAILING T-020

CURRICULUM DESCRIPTION

The Marketing and Retailing curriculum is designed to prepare the individual for positions in various marketing and retailing businesses and industries. This purpose will be fulfilled through study and application in areas such as marketing and merchandising techniques, management, selling, advertising, retailing and credit and collection procedures.

Through knowledge and skills, the individual will be able to perform marketing and distribution activities and, through the development of personal competencies and qualities, will be provided the opportunity to enter an array of marketing and distribution jobs.

JOB OPPORTUNITIES

ENTRY LEVEL
Display Person
General Salesperson
Assistant Buyer
Trainee Manager

ADVANCED LEVEL
Display Manager
Store Manager
Buyer
Department Manager

CURRICULUM BY QUARTERS

Course Title			**Hours Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
BUS	100	Basic Keyboarding	3	0	0	3
BUS	115	Business Law I	3	0	0	3
ENG	100	Oral Communication	3	0	0	3
MAT	119	Principles of Mathematics	5	0	0	5
			14	**0**	**0**	**14**
SECOND QUARTER						
BUS	109	Business Mathematics	5	0	0	5
BUS	116	Business Law II	3	0	0	3
BUS	232	Sales Development	3	0	0	3
BUS	263	Retailing I	3	0	0	3
ENG	101	Introduction to Written Communication	3	0	0	3
			17	**0**	**0**	**17**
THIRD QUARTER						
BUS	264	Retailing II	3	0	0	3
BUS	272	Principles of Supervision	3	0	0	3
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
ENG	102	Composition	3	0	0	3
PSY	101	Psychology	3	0	0	3
			15	**0**	**0**	**15**
FOURTH QUARTER						
BUS	120	Accounting I	4	0	3	5
EDP	101	Principles of Business Data Processing	3	2	0	4
EDP	104	Text Processing Applications I	3	0	0	3
ENG	115	Appreciation of Literature	3	0	0	3
			13	**2**	**3**	**15**
FIFTH QUARTER						
BUS	234	Sales Management	3	0	0	3
BUS	239	Marketing	5	0	0	5
BUS	245	Advertising Using Desktop Graphics	3	2	0	4
ECO	102	Economics I	3	0	0	3
ENG	205	Report Writing	3	0	0	3
			17	**2**	**0**	**18**
SIXTH QUARTER						
AIB	209	Installment Credit	4	0	0	4
BUS	128	Personal Financial Management	5	0	0	5
ECO	104	Economics II	3	0	0	3
EDP	156	Microcomputer Graphics	3	0	0	3
			15	**0**	**0**	**15**
SEVENTH QUARTER						
BUS	131	Human Relations Skills in Organizations	3	0	0	3
BUS	242	Visual Merchandising	3	2	0	4
BUS	262	Fashion Merchandising	3	2	0	4
BUS		Electives	6	0	0	6
			15	**4**	**0**	**17**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 112

MEDICAL ASSISTING T-058

CURRICULUM DESCRIPTION

The Medical Assisting curriculum prepares the graduate to be a multi-skilled practitioner qualified to perform administrative, clinical and laboratory procedures. The administrative aspects of instruction cover scheduling appointments; processing insurance accounts, medical reports, medical records, medical billing and collection; transcription and computer operations. Clinical and laboratory aspects of study include preparation of the patient for examination, assessing vital signs, assisting with examination and treatment, performing routine lab tests, using the electrocardiograph machine and administration of medication. Developing competencies in effective communication, managerial and supervisory skills, recognizing and responding to emergencies, and demonstrating adherence to ethical and legal standards of medical practices are emphasized.

JOB OPPORTUNITIES

Medical Assistant

CURRICULUM BY QUARTERS

Course Title	**Hours Per Week**			
	C	L	P	QH
FIRST QUARTER				
BUS 102 Keyboarding	3	2	0	4
ENG 100 Oral Communications	3	0	0	3
MED 100 Introduction to Medical Assisting	3	0	0	3
MED 101 Medical Terminology I	3	0	0	3
PHI 102 Introduction to Ethics	3	0	0	3
PSY 101 Psychology	3	0	0	3
	18	**2**	**0**	**19**
SECOND QUARTER				
BUS 103 Document Formatting	3	2	0	4
BUS 120 Accounting I	4	0	3	5
ENG 111 Grammar Skills	3	0	0	3
MED 102 Medical Terminology II	3	0	0	3
MED 127 Medical Law	3	0	0	3
	16	**2**	**3**	**18**
THIRD QUARTER				
BIO 107 Anatomy and Physiology I	3	2	0	4
BUS 132 Medical Transcription I	3	2	0	4
EDP 102 Microcomputer Concepts	3	0	0	3
ENG 101 Introduction to Written Communications	3	0	0	3
MED 125 Medical Administrative Office Procedures I	3	2	0	4
	15	**6**	**0**	**18**
FOURTH QUARTER				
BIO 108 Anatomy and Physiology II	3	2	0	4
BUS 133 Medical Transcription II	2	2	0	3
MED 126 Medical Administrative Office Procedures II	3	2	0	4
PSY 110 Lifespan Psychology	3	0	0	3
	11	**6**	**0**	**14**
FIFTH QUARTER				
MED 250 Exam Room Procedures I	3	6	0	6
MED 260 Lab Procedures I	2	4	0	4
MAT 112 Math for Health Sciences	5	0	0	5
	10	**10**	**0**	**15**
SIXTH QUARTER				
MED 220 Pharmacology	2	2	0	3
MED 225 Medical Insurance/Coding	3	0	0	3
MED 255 Exam Room Procedures II	2	4	0	4
MED 265 Lab Procedures II	2	4	0	4
	9	**10**	**0**	**14**
SEVENTH QUARTER				
MED 210 Clinical Lab	0	0	30	10
MED 205 Medical Assisting Seminar	3	0	0	3
	3	**0**	**30**	**13**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

FTCC Medical Assisting applicants MUST complete 1 unit each of high school algebra, biology and chemistry prior to admission to the program.

TOTAL CREDIT HOURS: 112

MEDICAL SONOGRAPHY T-180

CURRICULUM DESCRIPTION

Medical Sonography provides knowledge and clinical skills in the application of high frequency sound waves to image internal body structures. Physics, cross-sectional anatomy, abdominal, introductory vascular, and obstetrical/gynecological sonography are emphasized. Competency in identification of normal anatomy and pathological processes, use of equipment, stages of fetal growth and development, laboratory and testing procedures, integration of related imaging, and patient interaction skills are obtained to enable the graduate sonographer to perform high quality diagnostic sonographic procedures. Emphasis is placed on communication skills and applicable patient care skills.

Graduates of accredited programs may be eligible to apply to the American Registry of Diagnostic Medical Sonographers for examinations in ultrasound physics and instrumentation, as well as specialty examinations related to individual didactic and clinical concentrations.

Graduates may be employed as staff and department managers in clinics, private physicians' offices, mobile services, hospitals, equipment sales and applications, and as instructors in colleges and universities.

JOB OPPORTUNITIES

ENTRY LEVEL
Medical Sonographer
Ultrasound Sonographer/Technologist

ADVANCED LEVEL
Instructor
Applications Specialist
Sales Representative
Consultant

CURRICULUM BY QUARTERS

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
BIO 107 Anatomy and Physiology I	3	2	0	4
BIO 115 Medical Terminology I	1	0	0	1
BIO 116 Medical Terminology II	1	0	0	1
MAT 115 Fundamentals of Algebra	3	0	0	3
SON 101 Introduction to Sonography	3	2	0	4
SON 102 Medical Ethics and Patient Care	2	2	0	3
	13	**6**	**0**	**16**
SECOND QUARTER				
BIO 108 Anatomy and Physiology II	3	2	0	4
PHY 103 Introduction to Sound and Light	4	0	0	4
SON 103 Abdominal Ultrasound I	4	2	0	5
SON 110 Practicum I	2	0	6	4
	13	**4**	**6**	**17**
THIRD QUARTER				
BIO 169 Fundamentals of Disease Processes	4	0	0	4
SON 104 Abdominal Ultrasound II	5	2	0	6
SON 105 Sonographic Physics and Instrumentation	4	0	0	4
SON 120 Practicum II	2	0	15	7
	15	**2**	**15**	**21**
FOURTH QUARTER				
ENG 100 Oral Communication	3	0	0	3
ENG 101 Introduction to Written Communication	3	0	0	3
PSY 101 Psychology	3	0	0	3
SON 130 Practicum III	2	0	24	10
	11	**0**	**24**	**19**
FIFTH QUARTER				
SON 201 Obstetrical Ultrasound I	4	0	0	4
SON 202 Gynecological Ultrasound	3	0	0	3
SON 203 Case Studies I	2	0	0	2
SON 210 Practicum IV	2	0	24	10
	11	**0**	**24**	**19**
SIXTH QUARTER				
SON 204 Obstetrical Ultrasound II	4	0	0	4
SON 205 Vascular Sonography I	4	2	0	5
SON 206 Case Studies II	2	0	0	2
SON 220 Practicum V	2	0	24	10
	12	**2**	**24**	**21**
SEVENTH QUARTER				
SON 207 Vascular Sonography II	4	0	0	4
SON 208 Case Studies III	2	0	0	2
SON 230 Practicum VI	2	0	24	10
	8	**0**	**24**	**16**
EIGHTH QUARTER				
EDP 102 Microcomputer Concepts	3	0	0	3
ENG 115 Appreciation of Literature	3	0	0	3
PHI 102 Introduction to Ethics	3	0	0	3
PSY 111 Abnormal Behavior	3	0	0	3
Elective	3	0	0	3
	15	**0**	**0**	**15**

FTCC Medical Sonography applicants MUST complete 1 unit each of high school algebra, biology, and chemistry prior to admission to the program.

TOTAL CREDIT HOURS: 144

MICROCOMPUTER SYSTEMS TECHNOLOGY T-192

CURRICULUM DESCRIPTION

The purpose of the Microcomputer Systems Technology curriculum is to prepare graduates for employment with business, industry, and government organizations that use or are planning to use computers to process and manage information.

Using microcomputers or other small computer systems, students will learn to apply a variety of commonly used business applications and systems software; set up microcomputer hardware and install software; develop user training programs and user documentation; evaluate and recommend hardware and software; assist users in resolving hardware and software problems, and develop control and security procedures. Students will also learn the fundamentals of microcomputer networking.

JOB OPPORTUNITIES

ENTRY LEVEL
Technical Support Specialist
Microcomputer Consultant
Network Coordinator
Information Systems Specialist
Microcomputer Specialist
Microcomputer Salesperson
PC Support Specialist
Computer Support Rep.

ADVANCED LEVEL
Microcomputer Coordinator
Office Systems Analyst
Information Center Manager
Microcomputer Systems Analyst

CURRICULUM BY QUARTER

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
BUS	100	Basic Keyboarding	3	0	0	3
EDP	102	Microcomputer Concepts	3	0	0	3
EDP	109	Operating Systems I	3	0	0	3
ENG	100	Oral Communications	3	0	0	3
MAT	119	Principles of Mathematics	5	0	0	5
			17	**0**	**0**	**17**
SECOND QUARTER						
EDP	104	Text Processing Applications I	3	0	0	3
EDP	151	Operating Systems II	3	0	0	3
EDP	156	Microcomputer Graphics I	3	0	0	3
EDP	171	Alternative Operating Environments	3	0	0	3
MAT	117	EDP Mathematics	5	0	0	5
			17	**0**	**3**	**17**
THIRD QUARTER						
EDP	114	Text Processing Applications II	3	0	0	3
EDP	154	Micro. Communications	3	0	0	3
EDP	275	Hardware/Software Support	3	0	0	3
EDP	281	Operating Systems III	3	0	0	3
EDP	283	MultiMedia Presentations	3	0	0	3
ENG	101	Introduction to Written Communication	3	0	0	3
			18	**0**	**0**	**18**
FOURTH QUARTER						
BUS	120	Accounting I	4	0	3	5
EDP		Elective	3	0	0	3
ENG	102	Composition	3	0	0	3
PSY	101	Psychology	3	0	0	3
		General Elective	1	0	0	1
			14	**0**	**3**	**15**
FIFTH QUARTER						
BUS	280	Microcomputer Accounting Applications	3	0	0	3
EDP	150	Data Base Management Systems	3	0	0	3
EDP	152	Spreadsheet Operations I	3	0	0	3
EDP	164	Networking Technologies	3	0	0	3
EDP	173	Desktop Publishing I	3	0	0	3
EDP		Elective	3	0	0	3
			18	**0**	**0**	**18**
SIXTH QUARTER						
BUS	281	Microcomputer Accounting Applications	3	0	0	3
EDP	162	Spreadsheet Operations II	3	0	0	3
EDP	250	Programming I	3	0	0	3
EDP	264	Network Administration	3	0	0	3
ENG	103	Technical Report Writing	3	0	0	3
EDP		Elective	3	0	0	3
			18	**0**	**0**	**18**
SEVENTH QUARTER						
BUS	282	Microcomputer Accounting Applications	3	0	0	3
EDP	262	Programming II	3	0	0	3
EDP	284	Service and Support	3	0	0	3
EDP	289	Microcomputing Project	1	4	0	3
ENG	115	Appreciation of Literature	3	0	0	3
			15	**0**	**0**	**15**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 118

NUCLEAR MEDICINE TECHNOLOGY T-104

CURRICULUM DESCRIPTION

Nuclear medicine is a health technology which utilizes the internal administration of radioactive materials. The field is primarily diagnostic, although some therapeutic procedures are performed. The nuclear medicine technologist works under the direction of a physician who is licensed in the use of radioactive materials.

The Nuclear Medicine Technology curriculum prepares students to perform as clinical nuclear medicine technologists. The emphasis of the program is on the development of the skills needed by the clinical technologist. These skills include patient care, utilization of radioactive materials, operation of specialized imaging and counting instrumentation, and performance of laboratory procedures. In addition to the development of these skills, the students receive instruction relating to the theories and principles from which the clinical procedures are developed.

Graduates of the program may be eligible to apply for national certification/registration examinations given by the Nuclear Medicine Technology Certification Board (NMTCB) and the American Registry of Radiologic Technologists (ARRT).

Individuals who wish to enter a program of Nuclear Medicine Technology should, if possible, complete high school courses in algebra, biology, chemistry, and physics.

JOB OPPORTUNITIES

Nuclear Medicine Technologist

CURRICULUM BY QUARTERS

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
BIO 107	Anatomy and Physiology I	3	2	0	4
BIO 115	Medical Terminology I	1	0	0	1
CHM 103	Chemistry - General and Inorganic	3	2	0	4
MAT 113	Allied Health Math I	3	0	0	3
NMT 100	Intro. to Nuclear Medicine Technology	1	2	3	3
PSY 101	Psychology	3	0	0	3
		14	**6**	**3**	**18**
SECOND QUARTER					
BIO 108	Anatomy and Physiology II	3	2	0	4
BIO 116	Medical Terminology II	1	0	0	1
ENG 100	Oral Communication	3	0	0	3
MAT 114	Allied Health Math II	3	0	0	3
NMT 106	Nuclear Med. Tech. II	2	0	0	2
NMT 119	Introduction to Clinical Practice I	0	2	6	3
PHY 100	Introduction to Physics	3	0	0	3
		15	**4**	**6**	**19**
THIRD QUARTER					
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 116	Statistics	5	0	0	5
NMT 107	Nuclear Med. Tech. III	2	2	0	3
NMT 116	Nuclear Physics	2	0	0	2
NMT 124	Introduction to Clinical Practice II	0	0	12	4
PHY 102	Electricity and Electronics	3	0	0	3
PSY 111	Abnormal Behavior	3	0	0	3
		18	**2**	**12**	**23**
FOURTH QUARTER					
ENG 115	Appreciation of Literature	3	0	0	3
NMT 108	Nuclear Med. Tech. IV	3	0	0	3
NMT 117	Health Physics	2	0	0	2
NMT 201	(202, 203, or 204) Clinical Practice	0	0	21	7
NMT 213	Principles of Nuclear Pharmacy	3	0	0	3
		11	**0**	**21**	**18**
FIFTH QUARTER					
NMT 111	Principles of Nuclear Medicine I	2	0	0	2
NMT 202	(201, 203, or 204) Clinical Practice	0	0	21	7
NMT 220	Instrumentation I	2	0	0	2
NMT 225	Computers in Nuclear Medicine	3	0	0	3
		7	**0**	**21**	**14**
SIXTH QUARTER					
NMT 203	(201, 202, or 204) Clinical Practice	0	0	21	7
NMT 221	Principles of Nuclear Medicine II	2	0	0	2
NMT 235	Instrumentation II	2	2	0	3
NMT 251	Principles of In Vitro Nuclear Medicine I	2	2	0	3
		6	**4**	**21**	**15**
SEVENTH QUARTER					
NMT 204	(201, 202, or 203) Clinical Practice	0	0	21	7
NMT 231	Principles of Nuclear Medicine III	2	0	0	2
NMT 245	Instrumentation III	2	2	0	3
NMT 289	Radiobiology	2	0	0	2
		6	**2**	**21**	**14**
EIGHTH QUARTER					
NMT 258	Principles of In Vitro Nuclear Medicine II	2	2	0	3
NMT 290	Nuclear Medicine Technology Seminar	2	0	0	2
NMT 292	Nuclear Medicine Technology Review	2	0	0	2
NMT 300	Clinical Practice Review	0	0	15	5
SOC 103	Sociology	3	0	0	3
		9	**2**	**15**	**15**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 137

PARALEGAL TECHNOLOGY T-120

The Triad Regional Paralegal Technology Program is a cooperative educational program offered by Davidson County Community College at its own campus, Forsyth Technical Community College, Guilford Technical Community College, Rockingham Community College, and Rowan-Cabarrus Community College. All courses required in the program are available on each local campus.

CURRICULUM DESCRIPTION

The Paralegal Technology curriculum trains individuals in basic knowledge and applications of the law to work under the supervision of attorneys. The paralegal/legal assistant can support attorneys by performing routine legal tasks, and assisting with more complicated difficult legal work. Training will include legal specialty courses such as legal research, real estate, litigation preparation, as well as general subjects such as English, oral communications, mathematics, and computer skills.

Graduates of the Paralegal Technology curriculum are trained to assist an attorney or group of attorneys in many areas of the law. A paralegal/legal assistant is not able to practice law, give legal advice or represent clients in a court of law. However, paralegals/legal assistants cam represent clients in some administrative hearings. Paralegal graduates will be able to assist in work on probate matters, conduct investigations, search public records, and serve and file legal documents, perform library research, and provide office management. Employment opportunities and job descriptions vary greatly depending on whether a paralegal/legal assistant is hired by a private law firm, or a government agency, or a corporation such as a bank or insurance company.

JOB OPPORTUNITIES

ENTRY LEVEL
Legal Assistant
Paralegal

ADVANCED LEVEL
Senior Paralegal
Freelance Paralegal
Law Office Manager

Examples of employment opportunities for a Paralegal Technician:

- Public and private law firms
- Legal department of government
- Business and industry
- Law-related jobs in insurance
- Financial institutions
- Corporations
- Free lance opportunities

CURRICULUM BY QUARTERS

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
BUS 100*	Basic Keyboarding	3	0	0	3
BUS 115*	Business Law I	3	0	0	3
ENG 150*	Freshman Composition I	5	0	0	5
LEG 115D	Paralegal in the Legal System	3	0	0	3
MAT 115*	Fundamental Concepts of Algebra	3	0	0	3
		17	**0**	**0**	**17**
SECOND QUARTER					
BUS 116*	Business Law II	3	0	0	3
BUS 229*	Taxes	2	0	3	3
ENG 151*	Freshman Composition II	5	0	0	5
LEG 132D	Legal Research	3	2	0	4
		13	**2**	**3**	**15**
THIRD QUARTER					
EDP 103*	Intro. to Microcomputing	3	0	0	3
ENG 206*	Communications	3	0	0	3
LEG 134D	Legal Writing	2	0	0	2
LEG 135D	Legal Systems I	4	0	0	4
	Social Science Elective	3	0	0	3
		15	**0**	**0**	**15**
FOURTH QUARTER					
BUS 231D	Taxes for Paralegals	4	0	0	4
LEG 103D	Evidence for Paralegals	4	0	0	4
LEG 136D	Legal Systems II	4	0	0	4
LEG 225D	Law Office Management	4	0	0	4
	Elective* (Any three-hour technical or general education course)	3	0	0	3
		19	**0**	**0**	**19**
FIFTH QUARTER					
CJC 210D	Investigative Procedures	5	0	0	5
LEG 223D	Investigation of Civil Claims	4	0	0	4
LEG 227D	Estate Management I	4	0	0	4
LEG 282D	Property Transactions I	4	0	0	4
BIO 115*	Medical Terminology I	1	0	0	1
BIO 116*	Medical Terminology II	1	0	0	1
		19	**0**	**0**	**19**
SIXTH QUARTER					
LEG 207D	Legal Software	1	2	0	2
LEG 213D	Law and The Family	3	0	0	3
LEG 228D	Estate Management II	4	0	0	4
LEG 235D	Litigation Preparation	4	0	0	4
LEG 283D	Property Transactions II	4	0	0	4
		16	**2**	**0**	**17**
SEVENTH QUARTER					
ENG 100*	Oral Communication	3	0	0	3
LEG 214D	Domestic Law Documents	2	0	0	2
LEG 230D	Bankruptcy and Collection Process	4	0	0	4
LEG 261D	Clinical Practice	1	0	10	2
	or	***or***			
	Elective*	1	0	10	2
LEG 280D	Business Organizations Law	3	0	0	3
		13	**0**	**10**	**14**

*These are courses offered by Forsyth Technical Community College that will be accepted as substitute courses for the courses required by Davidson County Community College for graduation from the Paralegal Technology Program.

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 116

RADIATION THERAPY TECHNOLOGY T-221

CURRICULUM DESCRIPTION

Radiation therapy technology is a health science which applies prescribed doses of ionizing radiation to specific areas of the patient's body for treatment of disease, primarily cancer. The technologist works in conjunction with the radiation therapy staff nurses, physicists and physicians. The technologist through academic and clinical studies is skilled in treatment management, administration of prescribed radiation therapy treatment, and provision of patient support.

Radiation therapy technologists find employment in radiation therapy facilities in hospitals and free-standing cancer treatment centers. Major responsibilities fall into the specialties of patient care, patient education, research, and treatment planning (dosimetry).

Graduates are eligible to take the national examination given by the American Registry of Radiologic Technologists for certification and registration in radiation therapy technology.

Individuals preparing for enrollment in the curriculum should consider completion of courses in biology, geometry, and algebra prior to entrance. Courses in chemistry and physics have also proven to be helpful.

JOB OPPORTUNITIES

Radiation Therapy Technologist

CURRICULUM BY QUARTERS

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
BIO 107 Anatomy and Physiology I	3	2	0	4
BIO 115 Medical Terminology I	1	0	0	1
BIO 116 Medical Terminology II	1	0	0	1
EDP 103 Introduction to Microcomputing DOS	3	0	0	3
ENG 100 Oral Communication	3	0	0	3
RDT 112 Introduction to Patient Care Techniques	2	2	0	3
RDT 113 Departmental Orientation and Medical Ethics and Law	2	2	0	3
	15	**6**	**0**	**18**
SECOND QUARTER				
BIO 108 Anatomy and Physiology II	3	2	0	4
ENG 101 Introduction to Written Communication	3	0	0	3
PSY 101 Psychology	3	0	0	3
RDT 114 Basic Essentials of Radiologic Technology	2	2	0	3
RDT 128 Practicum I	0	2	9	4
RDT 139 Positioning and Related Anatomy I	3	0	0	3
	14	**6**	**9**	**20**
THIRD QUARTER				
MAT 115 Fundamental Concepts of Algebra	3	0	0	3
RDT 120 Radiation Physics	4	0	0	4
RDT 137 Radiographic Technique I	3	2	0	4
RDT 138 Practicum II	0	2	9	4
RDT 149 Positioning and Related Anatomy II	3	0	0	3
	13	**4**	**9**	**18**
FOURTH QUARTER				
ENG 115 Appreciation of Literature	3	0	0	3
RDT 130 Radiation Biology and Protection	3	0	0	3
RDT 237 Radiographic Technique II	2	2	0	3
RDT 269 Positioning and Related Anatomy II	3	0	0	3
RTT 130 Radiographic Imaging I	0	0	6	2
RTT 131 Radiation Therapy Positioning and Anatomy	1	0	0	1
	12	**2**	**6**	**15**
FIFTH QUARTER				
BIO 169 Fundamentals of Disease Processes	4	0	0	4
SOC 103 Sociology	3	0	0	3
RTT 205 Radiation Therapy Physics I	3	0	0	3
RTT 214 Orientation to Radiation Therapy	3	2	12	8
RTT 221 Clinical Oncology I	3	0	0	3
	16	**2**	**12**	**21**
SIXTH QUARTER				
PSY 115 Psychology of Helping Relationships	3	0	0	3
RTT 206 Radiation Therapy Physics II	3	0	0	3
RTT 215 Radiobiology	3	0	0	3
RTT 222 Clinical Oncology II	3	0	0	3
RTT 227 Radiation Therapy Practicum I	0	2	15	6
	12	**2**	**15**	**18**
SEVENTH QUARTER				
PSY 111 Abnormal Behavior	3	0	0	3
RTT 207 Dosimetry I	3	0	0	3
RTT 236 Radiation Therapy Procedures I	3	0	0	3
RTT 237 Radiation Therapy Practicum II	0	2	21	8
	9	**2**	**21**	**17**
EIGHTH QUARTER				
RTT 208 Dosimetry II	2	0	0	2
RTT 246 Radiation Therapy Procedures II	2	0	0	2
RTT 247 Radiation Therapy Practicum III	0	2	21	8
RTT 254 Departmental Administration and Quality Assurance	2	0	0	2
Elective	1	0	0	1
	7	**2**	**21**	**15**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

FTCC Radiation Therapy Technology applicants MUST complete 1 unit each of high school algebra, biology, and chemistry prior to admission to the program.

TOTAL CREDIT HOURS: 142

RADIOLOGIC TECHNOLOGY T-061
(Radiography)

CURRICULUM DESCRIPTION

The radiography curriculum prepares the graduate to use radiation to provide images of tissues, organs, bones, and vessels that comprise the human body. The curriculum includes instruction in patient care and management, radiation protection, imaging procedures, quality assurance, recording media processing, equipment maintenance, interpersonal communication, and professional responsibility through an integration of classroom, laboratory, and clinical education. The radiographer is a skilled healthcare professional qualified to provide patient services using imaging modalities as directed by qualified physicians.

Graduates may be employed in radiology departments in hospitals, clinics, physicians' offices, research and medical laboratories, federal and state agencies, and industry.

Graduates of accredited programs are eligible to apply to take the national examination administered by the American Registry of Radiologic Technologists for certification and registration as medical radiographers.

Individuals desiring a career in radiography should take courses in biology, algebra, and the physical sciences prior to entering the program.

JOB OPPORTUNITIES

Radiologic Technologist
Radiographer

CURRICULUM BY QUARTERS

Course Title **Hours Per Week**

		C	L	P	QH
FIRST QUARTER					
BIO 107	Anatomy and Physiology I	3	2	0	4
BIO 115	Medical Terminology I	1	0	0	1
BIO 116	Medical Terminology II	1	0	0	1
EDP 103	Introduction to Microcomputing DOS	3	0	0	3
ENG 100	Oral Communication	3	0	0	3
RDT 112	Introduction to Patient Care Techniques	2	2	0	3
RDT 113	Department Orientation and Medical Ethics and Law	2	2	0	3
		15	**6**	**0**	**18**
SECOND QUARTER					
BIO 108	Anatomy and Physiology II	3	2	0	4
ENG 101	Introduction to Written Communication	3	0	0	3
PSY 101	Psychology	3	0	0	3
RDT 114	Basic Essentials of Radiologic Technology	2	2	0	3
RDT 128	Practicum I	0	2	9	4
RDT 139	Positioning and Related Anatomy I	3	0	0	3
		14	**6**	**9**	**20**
THIRD QUARTER					
MAT 115	Fundamental Concepts of Algebra	3	0	0	3
RDT 120	Radiation Physics	4	0	0	4
RDT 137	Radiographic Technique I	3	2	0	4
RDT 138	Practicum II	0	2	9	4
RDT 149	Positioning and Related Anatomy II	3	0	0	3
		13	**4**	**9**	**18**
FOURTH QUARTER					
ENG 115	Appreciation of Literature	3	0	0	3
RDT 130	Radiation Biology and Protection	3	0	0	3
RDT 148	Practicum III	0	2	15	6
RDT 237	Radiographic Technique II	2	2	0	3
RDT 269	Positioning and Related Anatomy III	3	0	0	3
		11	**4**	**15**	**18**
FIFTH QUARTER					
BIO 169	Fundamentals of Disease Processes	4	0	0	4
PSY 111	Abnormal Behavior	3	0	0	3
RDT 248	Practicum IV	0	2	15	6
RDT 261	Pediatric, Emergency, and Operative Radiography	2	0	0	2
RDT 289	Film Critique I	3	0	0	3
		12	**2**	**15**	**18**
SIXTH QUARTER					
RDT 240	Digital Imaging	2	0	0	2
RDT 258	Practicum V	0	2	21	8
RDT 279	Positioning and Related Anatomy IV	3	0	0	3
RDT 290	Film Critique II	3	0	0	3
		8	**2**	**21**	**16**
SEVENTH QUARTER					
RDT 250	Special Procedures	3	0	0	3
RDT 254	Departmental Administration and Quality Assurance	3	0	0	3
RDT 268	Practicum VI	0	2	21	8
SOC 103	Sociology	3	0	0	3
		9	**2**	**21**	**17**
EIGHTH QUARTER					
RDT 278	Practicum VII	0	2	15	6
		0	**2**	**15**	**6**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as an unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

TOTAL CREDIT HOURS: 132

RESPIRATORY CARE TECHNOLOGY T-091

CURRICULUM DESCRIPTION

Respiratory Care Technology offers career education for individuals interested in becoming a respiratory therapy technician or respiratory therapist.

The respiratory therapist is qualified to assume primary responsibility for respiratory and cardiac care, including the supervision of technicians. The therapist makes patient care decisions concerning the use of life-support systems, oxygen therapy, and other breathing treatments. They also perform heart and lung studies. Graduates of the therapist program receive an associate's degree.

The technician performs tasks which include oxygen therapy, breathing treatments and equipment maintenance. Graduates of the technician program receive a diploma.

Graduates of accredited programs are eligible to apply for admission to the entry-level examination. Graduates of an accredited therapist program are also eligible to take the advanced practitioner examinations. These examinations are given by the National Board for Respiratory Care.

Graduates may be employed in hospitals, clinics, nursing homes, education, industry, and home care.

JOB OPPORTUNITIES

Respiratory Care Technician
Respiratory Therapist

CURRICULUM BY QUARTERS

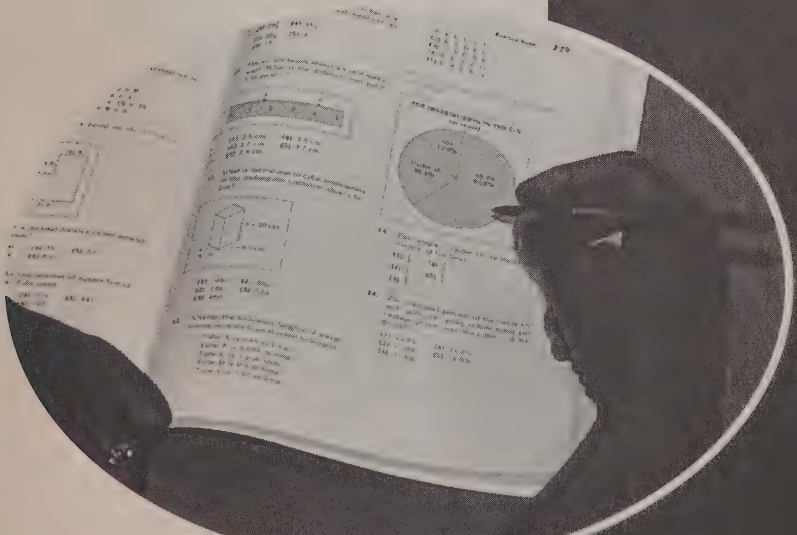
Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
BIO 107 Anatomy and Physiology I	3	2	0	4
BUS 141 Medical Vocabulary and Terminology	3	0	0	3
MAT 113 Allied Health Mathematics I	3	0	0	3
PHY 101 Concepts in Physics	3	0	0	3
RTH 109 Respiratory Care I	0	6	0	3
	12	**8**	**0**	**16**
SECOND QUARTER				
BIO 108 Anatomy and Physiology II	3	2	0	4
ENG 101 Introduction to Written Communication	3	0	0	3
MAT 114 Allied Health Mathematics II	3	0	0	3
RTH 111 Clinical Experience I	0	2	6	3
RTH 119 Respiratory Care II	2	2	0	3
RTH 149 Cardiopulmonary Anatomy and Physiology: Essentials for Respiratory Care I	2	0	0	2
	13	**6**	**6**	**18**
THIRD QUARTER				
BIO 169 Fundamentals of Disease Processes	4	0	0	4
RTH 112 Clinical Experience II	0	2	12	5
RTH 129 Respiratory Care III	2	2	0	3
RTH 150 Pharmacology	3	0	0	3
RTH 159 Cardiopulmonary Anatomy and Physiology: Essentials for Respiratory Care II	3	0	0	3
	12	**4**	**12**	**18**
FOURTH QUARTER				
EDP 103 Introduction to Microcomputing DOS	3	0	0	3
RTH 113 Clinical Experience III	0	2	12	5
RTH 160 Topics in General and Cardiopulmonary Surgery	1	0	0	1
RTH 170 ECG and Hemodynamic Monitoring	4	0	0	4
RTH 180 Cardiopulmonary Diseases	3	0	0	3
	11	**2**	**12**	**16**
FIFTH QUARTER				
ENG 102 Composition	3	0	0	3
RTH 215 Ventilators	2	2	0	3
RTH 218 Clinical Experience IV	0	2	12	5
RTH 220 Adult Critical Care	2	2	0	3
RTH 268 Cardiopulmonary Diagnostic Testing	1	2	0	2
	8	**8**	**12**	**16**
SIXTH QUARTER				
ENG 115 Appreciation of Literature	3	0	0	3
PSY 101 Psychology	3	0	0	3
RTH 228 Clinical Experience V	0	2	12	5
RTH 230 Perinatal and Pediatric Respiratory Care	3	2	0	4
	9	**4**	**12**	**15**
SEVENTH QUARTER				
ENG 100 Oral Communication	3	0	0	3
PSY 111 Abnormal Behavior	3	0	0	3
RTH 238 Clinical Experience VI	0	2	12	5
RTH 241 Respiratory Care Department Operations	1	0	0	1
RTH 275 Pulmonary Rehabilitation and Home Care	2	0	0	2
	9	**2**	**12**	**14**
EIGHTH QUARTER				
RTH 248 Clinical Experience VII	0	2	27	10
RTH 255 Seminar	1	0	0	1
RTH 260 Trauma Care	2	0	0	2
	3	**2**	**27**	**13**

In addition to the required curriculum courses, each student will be required to complete an additional one (1) course for a minimum of one (1) credit hour in order to receive the A.A.S. degree. This course will be designated as as unrestricted elective and must be chosen from disciplines outside the student's area of specialization.

FTCC Respiratory Care Technology applicants MUST complete 1 unit each of high school algebra, biology, and chemistry prior to admission to the program.

TOTAL CREDIT HOURS: 127

Pretechnical Program



PRETECHNICAL PROGRAM T-099

PROGRAM DESCRIPTION

The Pretechnical program provides students with an opportunity to build academic skills and acquire the background which should facilitate success in their desired curriculum.

For applicants to a degree curriculum who, on the basis of test results and past performance, do not qualify for immediate admission to their chosen program of study, noncredit developmental course work is available and may be required as a prerequisite for registration in specific credit courses. Students taking the required pretechnical work may also take specified courses within their desired curriculum.

Students may transfer all applicable credit courses into their curriculum when the criteria have been met and pretechnical and selected curriculum courses have been completed. All credit courses within the student's chosen curriculum will then be applied toward graduation.

Some developmental courses are also open to students who wish to take them for personal benefit.

This program offers a series of courses for preparation, remediation, and guidance for students who, for a variety of reasons, do not meet the specific entrance requirements for the regular curriculums of their choice. Students who do meet the minimum entrance requirements but whose previous academic records indicate that they may have difficulty in successfully completing their curriculums are also advised to complete the necessary coursework in the Pretechnical program.

The students' academic program will be individually designed to meet their specific preparatory and remedial needs. The courses will be selected from the pretechnical offerings and from technical and/or vocational credit courses.

SAMPLE COURSE LISTING

		C	L	P	QH
ACA 110	Study Skills	3	0	0	3

KEY TO SAMPLE COURSE LISTING

ACA ....Course Prefix

110 ....Course Number

Study Skills ....Course Title

C
3 . . .Number of Classroom Hours Per Week

L
0 . . .Number of Laboratory Hours Per Week

P
0 ....Number of Practicum Per Week (Practical application or clinical experience per week)

QH
3 ....Number of Quarter Hours Credit

COURSE OFFERINGS

Course Title		Hours Per Week C	L	P	QH*
ACA 100	Microcomputer as a Study Tool	3	0	0	3
ACA 109	Student Success Skills	2	0	0	2
ACA 110	Study Skills	3	0	0	3
BIO 010	Human Anatomy	5	0	0	0(5)
BUS 010	Pretechnical Accounting	5	0	0	0(5)
CHM 010	Pretechnical Chemistry	3	2	0	0(4)
ENG 001	Spelling	3	0	0	0(3)
ENG 005	Language Development I	2	2	0	0(3)
ENG 006	Language Development II	2	2	0	0(3)
ENG 007	Language Development III	2	2	0	0(3)
ENG 008	Language Development IV	2	2	0	0(3)
ENG 010	Basic Writing Skills I	5	0	0	0(5)
ENG 012	Basic Writing Skills II	5	0	0	0(5)
ENG 019	The Phonetic Approach to Language Structure	5	0	0	0(5)
ENG 021	Basic Reading Skills and Vocabulary I	3	0	0	0(3)
ENG 022	Basic Reading Skills and Vocabulary II	3	0	0	0(3)
ENG 023	Basic Reading Skills and Vocabulary III	3	0	0	0(3)
MAT 001	Structure of Arithmetic	5	0	0	0(5)
MAT 002	Prebusiness Mathematics	5	0	0	0(5)
MAT 003	Introductory Algebra	5	0	0	0(5)
MAT 004	Intermediate Algebra	5	0	0	0(5)
MAT 005	Geometry	5	0	0	0(5)
MAT 009	Algebra and Trigonometry	5	0	0	0(5)
MAT 020	Mathematics for Health Education	3	0	0	0(3)
NUT 001	Basic Nutrition	3	0	0	0(3)
PHY 001	Pretechnical Physics	3	2	0	0(4)

* Equivalent credit hours shown in parentheses.

College Transfer Curriculums

COLLEGE TRANSFER

CURRICULUM DESCRIPTION

The College Transfer curriculum is designed to offer students an opportunity to take the first two years of a liberal arts college curriculum. The course work includes literature, humanities, mathematics, physical education and the sciences. Students who maintain a grade average of C or better should be able to transfer these credits to a senior college or university and complete a bachelor's degree.

SAMPLE COURSE LISTING

Electives 30
ART 150

KEY TO SAMPLE COURSE LISTING

Electives . . . . .Category

30 . . . . .Total Credit Hours in Category

ART . . . . .Course Prefix

150 . . . . .Course Number

COLLEGE TRANSFER - ASSOCIATE IN ARTS C-011

CURRICULUM DESCRIPTION

The College Transfer curriculum is designed to offer students an opportunity to take the first two years of a liberal arts college curriculum. The course work includes composition and literature, humanities, mathematics, physical education and the sciences. Students who maintain a grade average of C or better should be able to transfer these credits to a senior college or university and complete a bachelor's degree. The Associate in Arts curriculum concentrates heavily on the humanities and social sciences and is recommended for those who plan to continue in a bachelor of arts degree program at a senior college.

CATEGORY . . . . .Credit Hours

English 20

Must include the following sequence:
ENG 150, 151
AND
Two courses selected from the following:
ENG 201, 202, 210, 211, 220, 230, 250

Humanities .5

One course selected from the following:
ART 150
ENG 201, 202, 210, 211, 220, 230, 250
(if not used to fulfill requirements for ENG -- see above)
MUS 150
PHI 101
SPA 150, 151
SPA 250, 251

Mathematics 10

Two courses selected from the following:
MAT 121, 122, 123, 124, 130

Orientation .3

Must include the following:
ORI 101

Physical Education 3

Must include the following:
PED 101
AND
Two courses selected from the following:
PED 102, 103, 157, 158, 171, 172, 211, 212, 224, 225, 271, 272

Sciences 12

Must include a laboratory sequence consisting of one of the following:
BIO 120, 121, 122
OR
CHM 110, 111, 113
OR
PHY 201, 202, 203
OR
PHY 211, 212, 213

Social Sciences 20

Must include the following sequence:
HIS 101, 102
AND
Two courses selected from the following:
ECO 149, 150
HIS 111, 150, 151
POL 102, 103
PSY 102, 108
SOC 102

Electives 30

ART 150
BIO 107, 108
BUS 120, 121, 122
ECO 149, 150
EDP 159
ENG 220, 230, 250
HIS 111, 150, 151
MAT 121, 122, 125, 126, 127, 128, 130
MUS 150
PHI 101
PHY 150
POL 102, 103
PSY 102, 108
SOC 102
SPA 150, 151, 250, 251

TOTAL CREDIT HOURS: 103

COLLEGE TRANSFER - ASSOCIATE IN SCIENCE C-050

CURRICULUM DESCRIPTION

The College Transfer curriculum is designed to offer students an opportunity to take the first two years of a liberal arts college curriculum. The course work includes composition and literature, humanities, mathematics, physical education and the sciences. Students who maintain a grade average of C or better should be able to transfer these credits to a senior college or university and complete a bachelor's degree. The Associate in Science curriculum concentrates on mathematics and the physical and life sciences and is intended for those pursuing a bachelor of science degree at a senior college.

CATEGORY . . . . .Credit Hours

English 20

Must include the following sequence:
ENG 150, 151
AND
Two courses selected from the following:
ENG 201, 202, 210, 211, 220, 230, 250

Mathematics 20

Must include the following sequence:
MAT 123, 124, 125, 126

Orientation .3

Must include the following:
ORI 101

Physical Education 3

Must include the following:
PED 101
AND
Two courses selected from the following:
PED 102, 103, 157, 158, 171, 172, 211, 212, 224, 225, 271, 272

Sciences 24-27

Must include two laboratory science sequences consisting of two of the following:
BIO 120, 121, 122
OR
CHM 110, 111, 113
OR
PHY 201, 202, 203
OR
PHY 211, 212, 213

Social Sciences 10

Must include the following sequence:
HIS 101, 102

Electives 18-20

ART 150
BIO 107, 108
BUS 120, 121, 122
ECO 149, 150
EDP 159
ENG 220, 230, 250
HIS 111, 150, 151
MAT 121, 122, 125, 126, 127, 128, 130
MUS 150
PHI 101
PHY 150
POL 102, 103
PSY 102, 108
SOC 102
SPA 150, 151, 250, 251

TOTAL CREDIT HOURS: 98-103

Vocational Diploma Curriculums

VOCATIONAL DIPLOMA CURRICULUMS

CURRICULUM DESCRIPTION

The diploma curriculums are practical in nature and are designed to prepare the student for immediate employment opportunities in a skilled trade. All curriculums are designed for one year or four consecutive quarters of intensive study. (Evening curriculums require approximately two years.) Upon completion of a curriculum, the graduate will be awarded the State Vocational Diploma. The vocational courses, forming each diploma curriculum, are not designed for transfer to associate's (or higher) degree levels of instruction.

SAMPLE COURSE LISTING

	C	L	P	QH
PHY 1101 Applied Science I	3	2	0	4
	3	2	0	4

KEY TO SAMPLE COURSE LISTING

PHY ....Course Prefix

121 ....Course Number

Applied Science I ....Course Title

C
3 . . .Number of Classroom Hours Per Week

L
2 . . .Number of Laboratory Hours Per Week

P
or CE
0 ....Number of Practicum Per Week
(Practical application or clinical
experience per week)

QH
4 ....Number of Quarter Hours Credit

3 2 0 4 ....Total Number of
Contact Hours Per Week

AIR CONDITIONING, HEATING, AND REFRIGERATION
V-024

CURRICULUM DESCRIPTION

The Air Conditioning, Heating, and Refrigeration curriculum is designed to teach the knowledge and skills necessary for servicing and installing residential and light commercial climate control equipment. Instruction will include heating and cooling theory, applied electricity and electronics, and the operating principles for a wide range of heating and cooling equipment. The diploma program will emphasize start-up and service skills for oil, gas, and electric furnaces, air-cooled air conditioning, and air-to-air heat pumps.

JOB OPPORTUNITIES

ENTRY LEVEL

Air Conditioning Mechanic
Heating and Air Conditioning Mechanic
Heating Mechanic
HVAC Service Technician

CURRICULUM BY QUARTERS

Course	Title	C	L	P	QH
		Hours Per Week			
FIRST QUARTER					
AHR 1102	Fundamentals of Refrigeration	6	0	9	9
MAT 1101	Fundamentals of Mathematics	5	0	0	5
PHY 1103	Fundamentals of Electricity	3	2	0	4
WLD 1111	Air Conditioning Welding	0	0	3	1
		14	**2**	**12**	**19**
SECOND QUARTER					
AHR 1103	Domestic and Commercial Refrigeration	6	0	12	10
DFT 1107	Blueprint Reading	1	0	3	2
ELC 1111	Applied Electricity	3	0	0	3
ENG 1101	Communications I	3	0	0	3
		13	**0**	**15**	**18**
THIRD QUARTER					
AHR 1104	Air Conditioning Controls I	5	0	3	6
AHR 1105	Principles of Air Conditioning	6	0	9	9
ENG 1112	Communications II	3	0	0	3
		14	**0**	**12**	**18**
FOURTH QUARTER					
AHR 1106	Air Conditioning Controls II	3	0	0	3
BUS 1103	Small Business Operations	3	0	0	3
HET 1101	Heating Systems	6	0	12	10
		12	**0**	**12**	**16**

TOTAL CREDIT HOURS: 71

AIR CONDITIONING, HEATING, AND REFRIGERATION

V-024 Evening Curriculum

CURRICULUM DESCRIPTION

The Air Conditioning, Heating, and Refrigeration curriculum is designed to teach knowledge and skills necessary for servicing and installing residential and light commercial climate control equipment. Instruction will include heating and cooling theory, applied electricity and electronics, and the operating principles for a wide range of heating and cooling equipment. The diploma program will emphasize start-up and service skills for oil, gas, and electric furnaces, air-cooled air conditioning, and air-to-air heat pumps.

JOB OPPORTUNITIES

ENTRY LEVEL

Air Conditioning Mechanic

Heating and Air Conditioning Mechanic

Heating Mechanic

HVAC Service Technician

CURRICULUM BY QUARTERS

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
AHR 1102A	Fundamentals of Refrigeration (Part I)	3	0	3	4
MAT 1101	Fundamentals of Mathematics	5	0	0	5
PHY 1103	Fundamentals of Electricity	3	2	0	4
		11	**2**	**3**	**13**
SECOND QUARTER					
AHR 1102B	Fundamentals of Refrigeration (Part II)	3	0	6	5
ELC 1111	Applied Electricity	3	0	0	3
		6	**0**	**6**	**8**
THIRD QUARTER					
AHR 1103A	Domestic and Commercial Refrigeration (Part I)	3	0	6	5
		3	**0**	**6**	**5**
FOURTH QUARTER					
AHR 1103B	Domestic and Commercial Refrigeration (Part II)	3	0	6	5
DFT 1107	Blueprint Reading	1	0	3	2
		4	**0**	**9**	**7**
FIFTH QUARTER					
AHR 1104	Air Conditioning Controls I	5	0	3	6
ENG 1101	Communications I	3	0	0	3
WLD 1111	Air Conditioning Welding	0	0	3	1
		8	**0**	**6**	**10**
SIXTH QUARTER					
AHR 1105	Principles of Air Conditioning	6	0	9	9
		6	**0**	**9**	**9**
SEVENTH QUARTER					
AHR 1106	Air Conditioning Controls II	3	0	0	3
ENG 1112	Communications II	3	0	0	3
HET 1101A	Heating Systems (Part I)	3	0	6	5
		9	**0**	**6**	**11**
EIGHTH QUARTER					
BUS 1103	Small Business Operations	3	0	0	3
HET 1101B	Heating Systems (Part II)	3	0	6	5
		6	**0**	**6**	**8**

TOTAL CREDIT HOURS: 71

AUTOMOTIVE BODY REPAIR V-001

CURRICULUM DESCRIPTION

The Automotive Body Repair curriculum provides training in the use of the equipment and materials of the auto body mechanic trade. The student studies the construction of the automobile body and techniques of auto body repairing, rebuilding, and refinishing.

Repairing, straightening, aligning, metal finishing, and painting of automobile bodies and frames are typical jobs performed. Job titles include automobile body repairperson, automotive painter, and frame and chassis repairperson. Persons completing this curriculum may find employment with franchised automobile dealers, independent garages, or may start their own business.

JOB OPPORTUNITIES

Automobile Accessories Installer
Automobile-Repair-Service Estimator
Appraiser, Automobile Damage
Automatic Window, Seat, and Top Lift Repairer
Painter Helper, Automotive
Painter, Transportation Equipment
Automobile Body Customizer
Automobile Body Repairer

CURRICULUM BY QUARTERS

68 Total Credit Hours

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
AUT 1111	Automotive Body Repair I	3	0	15	8
AUT 1142	Automotive Air Conditioning	2	0	3	3
ENG 1101	Communications I	3	0	0	3
MAT 1101	Fundamentals of Mathematics	5	0	0	5
		13	**0**	**18**	**19**
SECOND QUARTER					
AUT 1112	Automotive Body Repair II	3	0	15	8
ENG 1112	Communications II	3	0	0	3
PHY 1101	Applied Science I	3	2	0	4
WLD 1130	Applied Basic GMAW and Gas Welding	2	0	6	4
		11	**2**	**21**	**19**
THIRD QUARTER					
AUT 1113	Metal Finishing and Painting	2	0	12	6
AUT 1114	Frame Straightening and Alignment	4	0	9	7
PSY 1101	Human Relations	3	0	0	3
		9	**0**	**21**	**16**
FOURTH QUARTER					
AUT 1116	Automotive and Truck Painting	3	0	21	10
BUS 1103	Small Business Operations	3	0	0	3
DFT 1101	Schematics and Diagrams	0	0	3	1
		6	**0**	**24**	**14**

TOTAL CREDIT HOURS: 68

AUTOMOTIVE MECHANICS V-003

CURRICULUM DESCRIPTION

The Automotive Mechanics curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair, and adjust automotive vehicles. Manual skills are developed in practical shop work and the technical understanding of the operating principles involved in the modern automobile are taught through class assignments, discussions, and shop practices.

Automobile mechanics maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities and rural areas they also may service tractors or marine engines and other gasoline-powered equipment. Mechanics inspect and test to determine the causes of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition and use shop manuals and other technical publications as references for technical data. Persons completing this curriculum may find employment with franchised automobile dealers, independent garages, or may start their own business.

JOB OPPORTUNITIES

ENTRY LEVEL
General Mechanic
Tune-up Mechanic
Front-end Specialist
Automatic Transmission Specialist
Brake Specialist

ADVANCED LEVEL
Shop Supervisor
Shop Foreman

CURRICULUM BY QUARTERS

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
AUT 1130	Basic Electricity	2	0	3	3
AUT 1131	Intro. to Automobile and Shop Equipment	2	2	0	3
AUT 1132	Automobile Fuel Systems and Carburetors	1	0	3	2
AUT 1133	Automobile Brake Systems	2	0	6	4
MAT 1101	Fundamentals of Mathematics	5	0	0	5
		12	**2**	**12**	**17**
SECOND QUARTER					
AUT 1136	Automotive Electronics	1	0	3	2
AUT 1137	Automotive Electronic Fuel Injection	1	0	3	2
AUT 1138	Automobile Chassis and Suspension	2	0	6	4
AUT 1143	Basic Engine Operation and Repair	2	0	6	4
ENG 1101	Communications I	3	0	0	3
PHY 1101	Applied Science I	3	2	0	4
		12	**2**	**18**	**19**
THIRD QUARTER					
AUT 1139	Engine Performance with Diagnostics	2	0	6	4
AUT 1140	Automobile Wheel Alignment	1	0	3	2
AUT 1141	Standard Transmissions, Transaxles, and Drive Trains	2	0	6	4
ENG 1112	Communications II	3	0	0	3
HUM 1101	Humanities for Vocational Students	3	0	0	3
WLD 1101	Basic Gas and Arc Welding	1	0	3	2
		12	**0**	**18**	**18**
FOURTH QUARTER					
AUT 1135	Automobile Cranking, Charging, and Motor-Operated Systems	2	0	6	4
AUT 1142	Automotive Air Conditioning	2	0	3	3
AUT 1144	Automotive Emissions Controls	2	0	3	3
AUT 1145	Automatic Transmission Servicing	1	0	3	2
BUS 1103	Small Business Operations	3	0	0	3
MEC 1112	Machine Shop Processes	1	0	3	2
		11	**0**	**18**	**17**

TOTAL CREDIT HOURS: 71

AUTOMOTIVE MECHANICS V-003

Evening Curriculum

CURRICULUM DESCRIPTION

The Automotive Mechanics curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair, and adjust automotive vehicles. Manual skills are developed in practical shop work and the technical understanding of the operating principles involved in the modern automobile are taught through class assignments, discussions, and shop practices.

Automobile mechanics maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities and rural areas they also may service tractors or marine engines and other gasoline-powered equipment. Mechanics inspect and test to determine the causes of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition and use shop manuals and other technical publications as references for technical data. Persons completing this curriculum may find employment with franchised automobile dealers, independent garages, or may start their own business

JOB OPPORTUNITIES:

ENTRY LEVEL
General Mechanic
Tune-up Mechanic
Front-end Specialist
Automatic Transmission Specialist
Brake Specialist

ADVANCED LEVEL
Shop Supervisor
Shop Foreman

CURRICULUM BY QUARTERS

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
AUT 1130	Basic Electricity	2	0	3	3
AUT 1131	Intro. to Automobile and Shop Equipment	2	2	0	3
MAT 1101	Fundamentals of Mathematics	5	0	0	5
PHY 1101	Applied Science I	3	2	0	4
		12	**4**	**3**	**15**
SECOND QUARTER					
AUT 1132	Auto Fuel Systems and Carburetors	1	0	3	2
AUT 1133	Automobile Brake Systems	2	0	6	4
WLD 1101	Basic Gas and Arc Welding	1	0	3	2
		4	**0**	**12**	**8**
THIRD QUARTER					
AUT 1138	Automobile Chassis and Suspension	2	0	6	4
AUT 1143	Basic Engine Operations and Repair	2	0	6	4
		4	**0**	**12**	**8**
FOURTH QUARTER					
AUT 1136	Automotive Electronics	1	0	3	2
AUT 1140	Automobile Wheel Alignment	1	0	3	2
AUT 1142	Automotive Air Conditioning	2	0	3	3
MEC 1112	Machine Shop Processes	1	0	3	2
		5	**0**	**12**	**9**
FIFTH QUARTER					
AUT 1137	Automobile Electronic Fuel Injection	1	0	3	2
AUT 1139	Engine Performance with Diagnostics	2	0	6	4
ENG 1101	Communications I	3	0	0	3
		6	**0**	**9**	**9**
SIXTH QUARTER					
AUT 1135	Automobile Cranking, Charging, and Motor-Operated Systems	2	0	6	4
AUT 1144	Automotive Emissions Controls	2	0	3	3
		4	**0**	**9**	**7**
SEVENTH QUARTER					
AUT 1141	Standard Transmissions, Transaxles, and Drive Trains	2	0	6	4
AUT 1145	Automatic Transmission Servicing	1	0	3	2
BUS 1103	Small Business Operations	3	0	0	3
ENG 1112	Communications II	3	0	0	3
HUM 1101	Humanities for Vocational Students	3	0	0	3
		12	**0**	**9**	**15**

TOTAL CREDIT HOURS: 71

DIESEL VEHICLE MAINTENANCE V-013

CURRICULUM DESCRIPTION

The Diesel Vehicle Maintenance curriculum provides a program for developing the basic knowledge and skills needed in diesel vehicle maintenance. Manual skills are developed in practical shop work.

The use of diesel engines is found in farm and construction equipment, electric generators, trucks, buses, trains, automobiles, and ships. Many diesel vehicle mechanics specialize in maintenance and repair of equipment; others specialize in rebuilding engines.

Diesel vehicle mechanics are instructed through class assignments, discussion, and shop practice to maintain and repair engines, chassis and suspensions, and power trains used to power farm equipment, construction equipment, buses, and trucks. They use handtools, precision measuring and testing instruments, and power tools in overhauling and maintaining diesel-powered equipment.

JOB OPPORTUNITIES

Diesel Mechanic
Diesel Mechanic Apprentice
Diesel Mechanic Helper
Fuel-Injection Servicer
Tractor Mechanic Helper
Repairer, Heavy
Construction Equipment Mechanic Helper
Spring Repairer Helper, Hand
Maintenance Mechanic Helper

CURRICULUM BY QUARTERS

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
DFT 1101	Schematics and Diagrams	0	0	3	1
DVM 1110	Introduction to Diesel	1	0	3	2
DVM 1111	Vehicle Servicing	3	0	9	6
DVM 1112	Basic Electricity	2	0	3	3
DVM 1113	Air Brakes	2	0	3	3
MAT 1101	Fundamentals of Mathematics	5	0	0	5
		13	**0**	**21**	**20**
SECOND QUARTER					
DVM 1114	Diesel Engines	4	0	15	9
DVM 1115	Drive Trains	2	0	6	4
ELN 1110	Basic Electronics	1	0	3	2
PHY 1102	Applied Science II	3	2	0	4
		10	**2**	**24**	**19**
THIRD QUARTER					
DVM 1116	Suspension and Steering	2	0	6	4
DVM 1117	Truck Charging and Starting Systems	2	0	6	4
DVM 1119	Diesel Fuel Systems	2	0	6	4
ENG 1112	Communications II	3	0	0	3
HUM 1101	Humanities for Vocational Students	3	0	0	3
WLD 1101	Basic Gas and Arc Welding	1	0	3	2
		13	**0**	**21**	**20**
FOURTH QUARTER					
BUS 1103	Small Business Operations	3	0	0	3
DVM 1118	Truck Electrical Systems	1	0	6	3
DVM 1120	Diesel Truck Maintenance	2	0	6	4
DVM 1121	Truck Air Conditioning	2	0	3	3
MEC 1120	Machine Processes	1	0	6	3
		9	**0**	**21**	**16**

TOTAL CREDIT HOURS: 75

ELECTRICAL INSTALLATION V-018

CURRICULUM DESCRIPTION

The Electrical Installation curriculum is designed to provide a training program in the basic knowledge, fundamentals, and practices involved in the electrical trades. A large segment of the program is laboratory and shop instruction designed to give the student practical knowledge and application experience in the fundamentals taught in class.

The graduate of this curriculum is qualified to enter an electrical trade as an on-the-job trainee or apprentice, assisting in the layout and installation of electrical systems in residential, commercial, or industrial settings.

JOB OPPORTUNITIES

ENTRY LEVEL
Electrical Apprentice

ADVANCED LEVEL
Electrician

CURRICULUM BY QUARTERS

Course Title			**Hours Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
ELC	1121	Electrical Installation Fundamentals	7	0	15	12
MAT	1101	Fundamentals of Mathematics	5	0	0	5
PHY	1103	Fundamentals of Electricity	3	2	0	4
			15	**2**	**15**	**21**
SECOND QUARTER						
DFT	1110	Blueprint Reading I	0	0	3	1
ELC	1122	Residential Wiring I	7	0	15	12
ENG	1101	Communications I	3	0	0	3
PHY	1102	Applied Science II	3	2	0	4
			13	**2**	**18**	**20**
THIRD QUARTER						
DFT	1113	Blueprint Reading: Electrical	0	0	3	1
ELC	1123	Residential Wiring II	6	0	15	11
ENG	1112	Communications II	3	0	0	3
PSY	1101	Human Relations	3	0	0	3
			12	**0**	**18**	**18**
FOURTH QUARTER						
BUS	1103	Small Business Operations	3	0	0	3
ELC	1125	Commercial and Industrial Wiring	6	0	15	11
ELN	1118	Industrial Electronics	3	0	3	4
			12	**0**	**18**	**18**

TOTAL CREDIT HOURS: 77

ELECTRONIC SERVICING V-042

CURRICULUM DESCRIPTION

The curriculum in Electronic Servicing is designed to provide basic knowledge and skills required in the installation, maintenance, and servicing of electronic components and systems. Laboratory time will be spent verifying electronic theory and principles, and learning installation, maintenance, and service techniques.

An electronic service technician will be able to install, maintain, and service electronic equipment, including radios, televisions, audio/video recording and playback equipment, home entertainment systems, digital electronic systems, Master Antenna Television, and cable television components and systems.

JOB OPPORTUNITIES

Electronic Service Technician
Audio/Video Service Technician
Radio Service Technician
Television Service Technician

CURRICULUM BY QUARTERS

Course Title			**Hours Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
ELC	1120	Direct and Alternating Current	7	0	15	12
ENG	1101	Communications I	3	0	0	3
MAT	1115	Elements of Mathematics I	5	0	0	5
			15	**0**	**15**	**20**
SECOND QUARTER						
ELN	1121	Solid State Devices and Circuits	5	0	9	8
ELN	1122	Transistor Theory and Circuits	4	0	9	7
MAT	1116	Elements of Mathematics II	3	0	0	3
			12	**0**	**18**	**18**
THIRD QUARTER						
ELN	1123	Black and White Television Servicing	7	0	18	13
PHY	1104	Applied Science IV	3	2	0	4
			10	**2**	**18**	**17**
FOURTH QUARTER						
ELN	1124	Color Television Servicing	6	0	21	13
ENG	1112	Communications II	3	0	0	3
			9	**0**	**21**	**16**

TOTAL CREDIT HOURS: 71

GRAPHIC ARTS - PRINTING V-022

CURRICULUM DESCRIPTION

This curriculum gives individuals experience with equipment and a working knowledge of methods used in the graphic arts industry. Ample opportunities are provided for students to develop skills in the operation of machines and equipment and to become familiar with a wide range of graphic processes.

There are many distinct occupations in the graphic arts industry. Graduates will be able to set type by various methods, prepare copy and artwork, proofread, operate presses, understand the photomechanical process, operate bindery equipment and perform a variety of other graphic arts skills.

JOB OPPORTUNITIES

Printer
Printer Helper
Press Operator
Press Operator Apprentice
Paste-up Artist
Camera Process Operator
Image Assembler
Typesetter

CURRICULUM BY QUARTERS

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
BUS 1122	Vocational Keyboarding	3	0	0	3
PRN 1131	Introduction to Printing	6	0	12	10
PRN 1150	Printer's Mathematics	5	0	0	5
		14	**0**	**12**	**18**
SECOND QUARTER					
EDP 1101	Desktop Publishing for Graphic Arts	3	0	0	3
PHY 1114	Science for Printers	3	2	0	4
PRN 1132	Offset Printing I	4	0	12	8
PRN 1134	Composition I	3	0	6	5
		13	**2**	**18**	**20**
THIRD QUARTER					
ENG 1101	Communications I	3	0	0	3
PRN 1133	Offset Printing II	6	0	15	11
PRN 1135	Composition II	3	0	3	4
		12	**0**	**18**	**18**
FOURTH QUARTER					
BUS 1103	Small Business Operations	3	0	0	3
ENG 1112	Communications II	3	0	0	3
PRN 1136	Estimating	5	0	0	5
PRN 1137	Printing Project	0	0	21	7
		11	**0**	**21**	**18**

TOTAL CREDIT HOURS: 74

MACHINIST V-032

CURRICULUM DESCRIPTION

The Machinist curriculum gives individuals the opportunity to acquire basic skills and related technical information necessary to gain employment in the metalworking industries. The machinist is a skilled metalworker who shapes metal by using machine tools and hand tools. Machinists must be able to set up and operate the machine tools found in a modern shop. Computer Numerical Control (CNC) may be integrated into various phases of the curriculum or as specialized courses.

The machinist is able to select the proper tools and materials required for each job and to plan the cutting and finishing operations in their proper order so that the work can be finished according to blueprint or written specifications. The machinist makes computations relating to dimensions of work, tooling, feeds, and speeds of machining. Precision measuring instruments are used to measure the accuracy of work. The machinist also must know the characteristics of metals so that annealing and hardening of tools and metal parts can be accomplished in the process of turning a block of metal into an intricate, precise part.

JOB OPPORTUNITIES

ENTRY LEVEL
Machinist ApprenticeTool and Die Maker
Apprentice Machine Set-up Operator
Quality Control Technician
Production Machine Operator
CNC Set-up Operators

ADVANCED LEVEL
Machinist
Maintenance Machinist

CURRICULUM BY QUARTERS

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
DFT 1104	Mechanical Drawing I	1	0	3	2
HUM 1101	Humanities for Vocational Students	3	0	0	3
MAT 1101	Fundamentals of Mathematics	5	0	0	5
MEC 1101	Machine Shop Theory and Practice I	4	0	12	8
		13	**0**	**15**	**18**
SECOND QUARTER					
DFT 1105	Mechanical Drawing II	1	0	3	2
MAT 1102	Algebra	5	0	0	5
MEC 1102	Machine Shop Theory and Practice II	4	0	12	8
MEC 1115	Metallurgy for Machinists	2	0	3	3
		12	**0**	**18**	**18**
THIRD QUARTER					
DFT 1106	Mechanical Drawing III	1	0	3	2
ENG 1112	Communications II	3	0	0	3
MAT 1103	Geometry	3	0	0	3
MEC 1103	Machine Shop Theory and Practice III	3	0	12	7
MEC 1113	CNC Lathe Operation	1	0	3	2
		11	**0**	**18**	**17**
FOURTH QUARTER					
MAT 1104	Trigonometry	3	0	0	3
MEC 1104	Machine Shop Theory and Practice IV	3	0	12	7
MEC 1114	CNC Milling Machine Operation	1	0	3	2
PHY 1101	Applied Science I	3	2	0	4
		10	**2**	**15**	**16**

TOTAL CREDIT HOURS: 69

MACHINIST V-032

Evening Curriculum

CURRICULUM DESCRIPTION

The Machinist curriculum gives individuals the opportunity to acquire basic skills and related technical information necessary to gain employment in the metalworking industries. The machinist is a skilled metalworker who shapes metal by using machine tools and hand tools. Machinists must be able to set up and operate the machine tools found in a modern shop. Computer Numerical Control (CNC) may be integrated into various phases of the curriculum or as specialized courses.

The machinist is able to select the proper tools and materials required for each job and to plan the cutting and finishing operations in their proper order so that the work can be finished according to blueprint or written specifications. The machinist makes computations relating to dimensions of work, tooling, feeds, and speeds of machining. Precision measuring instruments are used to measure the accuracy of work. The machinist also must know the characteristics of metals so that annealing and hardening of tools and metal parts can be accomplished in the process of turning a block of metal into an intricate, precise part.

JOB OPPORTUNITIES

ENTRY LEVEL
Machinist ApprenticeTool and Die Maker
Apprentice Machine Set-up Operator
Quality Control Technician
Production Machine Operator
CNC Set-up Operators

ADVANCED LEVEL
Machinist
Maintenance Machinist

CURRICULUM BY QUARTERS

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
HUM 1101	Humanities for Vocational Students	3	0	0	3
MAT 1101	Fundamentals of Mathematics	5	0	0	5
MEC 1101A	Machine Shop Theory and Practice I (Part I)	2	0	6	4
		10	**0**	**6**	**12**
SECOND QUARTER					
ENG 1112	Communications II	3	0	0	3
MAT 1102	Algebra	5	0	0	5
MEC 1101B	Machine Shop Theory and Practice I (Part II)	2	0	6	4
		10	**0**	**6**	**12**
THIRD QUARTER					
MAT 1103	Geometry	3	0	0	3
MEC 1102A	Machine Shop Theory and Practice II (Part I)	2	0	6	4
MEC 1115	Metallurgy for Machinists	2	0	3	3
		7	**0**	**9**	**10**
FOURTH QUARTER					
MAT 1104	Trigonometry	3	0	0	3
MEC 1102B	Machine Shop Theory and Practice II (Part II)	2	0	6	4
PHY 1101	Applied Science I	3	2	0	4
		8	**2**	**6**	**11**
FIFTH QUARTER					
DFT 1104	Mechanical Drawing I	1	0	3	2
MEC 1103A	Machine Shop Theory and Practice III (Part I)	2	0	6	4
MEC 1113	CNC Lathe Operation	1	0	3	2
		4	**0**	**12**	**8**
SIXTH QUARTER					
DFT 1105	Mechanical Drawing II	1	0	3	2
MEC 1103B	Machine Shop Theory and Practice III (Part II)	1	0	6	3
MEC 1114	CNC Milling Machine Operation	1	0	3	2
		3	**0**	**12**	**7**
SEVENTH QUARTER					
MEC 1104	Machine Shop Theory and Practice IV	3	0	12	7
DFT 1106	Mechanical Drawing III	1	0	3	2
		4	**0**	**15**	**9**

TOTAL CREDIT HOURS: 69

PLUMBING AND PIPEFITTING V-037

CURRICULUM DESCRIPTION

The Plumbing and Pipefitting curriculum is designed to train individuals to repair or install plumbing systems in residences and small commercial buildings. Courses in plumbing practices and pipefitting are included to provide practical experience, as well as courses in theory that one must know to advance and keep up to date with innovations. Other courses in communication skills, physics, human relations, and business operations are provided to assist the individual in occupational growth.

Plumbers are employed by contractors in the building construction fields to install pipe systems which carry water, steam, air, or other liquids or gases for sanitation, heating, industrial production, and various other uses. They also alter and repair existing pipe systems and install plumbing fixtures, appliances, and heating and refrigeration units.

JOB OPPORTUNITIES

ENTRY LEVEL
Plumber (Apprentice)
Pipefitter (Apprentice)

ADVANCED LEVEL (with experience)
Plumber
Pipefitter
Foreman or Supervisor

CURRICULUM BY QUARTERS

Course Title			**Hours Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
DFT	1110	Blueprint Reading I	0	0	3	1
MAT	1101	Fundamentals of Mathematics	5	0	0	5
PLU	1131	Plumbing I	8	0	15	13
			13	**0**	**18**	**19**
SECOND QUARTER						
ENG	1101	Communications I	3	0	0	3
PHY	1101	Applied Science I	3	2	0	4
PLU	1132	Plumbing II	3	0	15	8
WLD	1101	Basic Gas and Arc Welding	1	0	3	2
			10	**2**	**18**	**17**
THIRD QUARTER						
DFT	1112	Drafting I: Plumbing	1	0	3	2
PLU	1133	Plumbing III	5	0	18	11
PSY	1101	Human Relations	3	0	0	3
			9	**0**	**21**	**16**
FOURTH QUARTER						
BUS	1103	Small Business Operations	3	0	0	3
ENG	1112	Communications II	3	0	0	3
PLU	1134	Plumbing IV	3	0	21	10
			9	**0**	**21**	**16**

TOTAL CREDIT HOURS: 68

PRACTICAL NURSING V-038

CURRICULUM DESCRIPTION

The Practical Nursing curriculum is designed to prepare the graduate to participate in assessing, planning, implementing and evaluating nursing care. The graduate is eligible to apply to take the National Council Licensure Examination (NCLEX-PN), which is required for practice as a Licensed Practical Nurse. Licensed practical nurses function under the supervision of the registered nurse or physician.

Licensed practical nurses may be employed in hospitals, long-term care facilities, clinics, doctors' offices, industry, and community health agencies.

Individuals desiring a career in practical nursing should be encouraged to take math and science courses in high school.

JOB OPPORTUNITIES

Nurse, Licensed Practical

CURRICULUM BY QUARTERS

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
NUR 1011	Nursing I	7	2	6	10
NUR 1012	Pharmacology	2	0	0	2
BIO 107	Anatomy and Physiology I	3	2	0	4
PSY 101	Psychology	3	0	0	3
		15	**4**	**6**	**19**
SECOND QUARTER					
NUR 1021	Nursing II	8	2	12	13
BIO 108	Anatomy & Physiology II	3	2	0	4
PSY 110	Lifespan Psychology	3	0	0	3
		14	**4**	**12**	**20**
THIRD QUARTER					
NUR 1031	Nursing III	8	2	12	13
ENG 101	Introduction to Written Communication	3	0	0	3
		11	**2**	**12**	**16**
FOURTH QUARTER					
NUR 1041	Nursing IV	8	0	15	13
NUR 1042	Nursing Trends	1	0	0	1
		9	**0**	**15**	**14**

FTCC Practical Nursing applicants MUST complete 1 unit each of high school algebra, biology and chemistry prior to admission to the program.

TOTAL CREDIT HOURS: 69

RESIDENTIAL CARPENTRY V-007

CURRICULUM DESCRIPTION

The Residential Carpentry curriculum trains students to construct and make repairs to residential structures using standard building materials and hand and power tools. This curriculum is designed to teach carpentry skills and a general knowledge of residential construction. Instruction also includes the study of mathematics, blueprint reading, building codes and energy-efficient construction.

Graduates will have a working knowledge of building materials, concrete form construction, rough framing, roofing, stair construction, insulation and the application of interior and exterior trim.

Graduates should qualify for employment in the residential building construction field as rough carpenters, framing carpenters, roofers, maintenance carpenters and other related job titles.

JOB OPPORTUNITIES

ENTRY LEVEL
Apprentice Carpenter
Maintenance Carpenter
Framing Carpenter
Trim Carpenter
Roofer

CURRICULUM BY QUARTERS

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
CAR 1101	Carpentry I	5	0	15	10
DFT 1110	Blueprint Reading I	0	0	3	1
ENG 1101	Communications I	3	0	0	3
MAT 1101	Fundamentals of Mathematics	5	0	0	5
		13	**0**	**18**	**19**
SECOND QUARTER					
CAR 1102	Carpentry II	5	0	15	10
DFT 1111	Blueprint Reading II	0	0	3	1
ENG 1112	Communications II	3	0	0	3
MAT 1114	Carpenter's Mathematics	5	0	0	5
		13	**0**	**18**	**19**
THIRD QUARTER					
CAR 1103	Carpentry III	5	0	15	10
PSY 1101	Human Relations	3	0	0	3
CAR 1114	Building Codes	3	0	0	3
		11	**0**	**15**	**16**
FOURTH QUARTER					
BUS 1103	Small Business Operations	3	0	0	3
CAR 1105	Carpentry IV	5	0	15	10
CAR 1115	Estimating for Residential Construction	2	0	0	2
		10	**0**	**15**	**15**

TOTAL CREDIT HOURS: 69

WELDING V-050

CURRICULUM DESCRIPTION

The Welding curriculum gives students sound knowledge of the principles, methods, techniques, and skills essential for successful employment in the welding field and metals industry. Welders join metals by applying intense heat, and sometimes pressure, to form a permanent bond between intersecting metals.

Welding offers employment in practically any industry: shipbuilding, automotive, aircraft, guided missiles, heavy equipment, railroads, construction, pipefitting, production shops, job shops, and many others.

JOB OPPORTUNITIES

ENTRY LEVEL
Arc Welder
Arc Welding - Machine Operator
Gas Welding - Machine Operator
Gas Welder
Welder - Assembler
Combination Welder

ADVANCED LEVEL
Lay-out Worker I
Welder - Fitter

CURRICULUM BY QUARTERS

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
DFT 1104	Mechanical Drawing I	1	0	3	2
MAT 1101	Fundamentals of Mathematics	5	0	0	5
ENG 1101	Communications 1	3	0	0	3
WLD 1120	Oxyacetylene Welding and Cutting	2	0	6	4
WLD 1129	Basic Gas Metal Arc Welding	2	0	9	5
		13	**0**	**18**	**19**
SECOND QUARTER					
DFT 1117	Blueprint Reading: Welding	0	0	3	1
ENG 1112	Communications II	3	0	0	3
PHY 1103	Fundamentals of Electricity	3	2	0	4
WLD 1121	Basic Arc Welding	4	0	15	9
		10	**2**	**18**	**17**
THIRD QUARTER					
MAT 1103	Geometry	3	0	0	3
MEC 1117	Metallurgy for Welders	2	0	3	3
PSY 1101	Human Relations	3	0	0	3
WLD 1123	Inert Gas Welding	1	0	6	3
WLD 1124	Advanced Arc Welding	3	0	12	7
		12	**0**	**21**	**19**
FOURTH QUARTER					
MEC 1112	Machine Shop Processes	1	0	3	2
WLD 1113	Mechanical Testing and Inspection	1	0	3	2
WLD 1126	Advanced Inert Gas Welding	3	0	9	6
WLD 1128	Welding Procedures and Practices	1	0	6	3
		6	**0**	**21**	**13**

TOTAL CREDIT HOURS: 68

WELDING V-050

Evening Curriculum

CURRICULUM DESCRIPTION

The Welding curriculum gives students sound knowledge of the principles, methods, techniques, and skills essential for successful employment in the welding field and metals industry. Welders join metals by applying intense heat, and sometimes pressure, to form a permanent bond between intersecting metals.

Welding offers employment in practically any industry: shipbuilding, automotive, aircraft, guided missiles, heavy equipment, railroads, construction, pipefitting, production shops, job shops, and many others.

JOB OPPORTUNITIES

ENTRY LEVEL
Arc Welder
Arc Welding - Machine Operator
Gas Welding - Machine Operator
Gas Welder
Welder - Assembler
Combination Welder

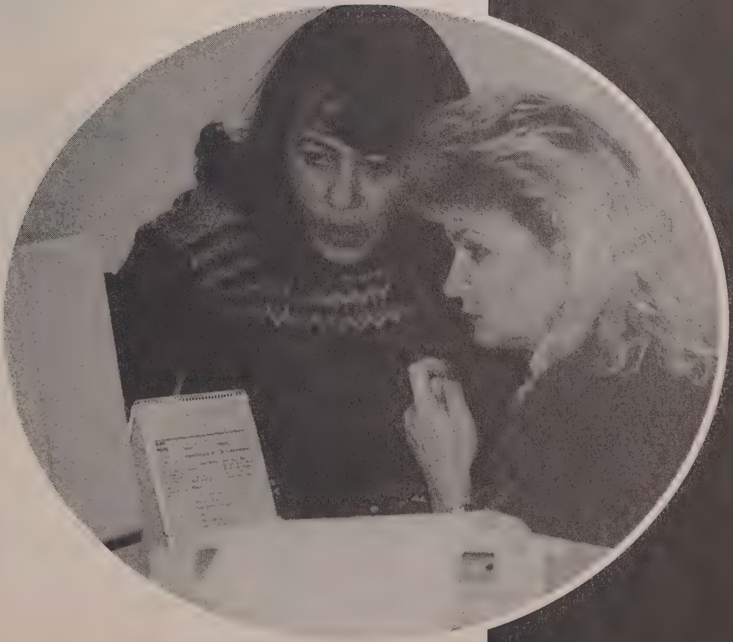
ADVANCED LEVEL
Lay-out Worker I
Welder - Fitter

CURRICULUM BY QUARTERS

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
DFT 1104	Mechanical Drawing I	1	0	3	2
PHY 1103	Fundamentals of Electricity	3	2	0	4
WLD 1120	Oxyacetylene Welding and Cutting	2	0	6	4
		6	**2**	**9**	**10**
SECOND QUARTER					
MAT 1101	Fundamentals of Mathematics	5	0	0	5
WLD 1129	Basic Gas Metal Arc Welding	2	0	9	5
		7	**0**	**9**	**10**
THIRD QUARTER					
DFT 1117	Blueprint Reading: Welding	0	0	3	1
ENG 1101	Communications I	3	0	0	3
WLD 1121A	Basic Arc Welding (Part I)	2	0	6	4
		5	**0**	**9**	**8**
FOURTH QUARTER					
PSY 1101	Human Relations	3	0	0	3
WLD 1121B	Basic Arc Welding (Part II)	2	0	9	5
		5	**0**	**9**	**8**
FIFTH QUARTER					
MEC 1117	Metallurgy for Welders	2	0	3	3
WLD 1124A	Advanced Arc Welding (Part I)	2	0	9	5
		4	**0**	**12**	**8**
SIXTH QUARTER					
MEC 1112	Machine Shop Processes	1	0	3	2
WLD 1123	Inert Gas Welding	1	0	6	3
WLD 1124B	Advanced Arc Welding (Part II)	1	0	3	2
		3	**0**	**12**	**7**
SEVENTH QUARTER					
ENG 1112	Communications II	3	0	0	3
WLD 1126	Advanced Inert Gas Welding	3	0	9	6
		6	**0**	**9**	**9**
EIGHTH QUARTER					
MAT 1103	Geometry	3	0	0	3
WLD 1113	Mechanical Testing and Inspection	1	0	3	2
WLD 1128	Welding Procedures and Practices	1	0	6	3
		5	**0**	**9**	**8**

TOTAL CREDIT HOURS: 68

Certificate Curriculums



CERTIFICATE CURRICULUMS

Certificate curriculums are especially designed educational plans of study drawn from existing curriculums for persons who desire to improve their job skills in a particular area of interest.

The programs are also designed to meet the needs of employers in upgrading the occupational skills of their employees. Each certificate program may be tailored toward the requirements of a specific business, industry, or organization.

BENEFITS

Short program:
3 or 4 quarters

Practical application:
immediate hands-on and real-world application

Training on newest equipment:
IBM electronic typewriters
AT&T personal computers
IBM personal computers

Software used:
Lotus 1, 2, 3
Wordstar
dBase II, III

SAMPLE COURSE LISTING

	C	L	P	QH
BUS 102 Keyboarding	3	2	0	4
	3	**2**	**0**	**4**

KEY TO SAMPLE COURSE LISTING

BUS ....Course Prefix

102 ....Course Number

Keyboarding ....Course Title

C
3 . . .Number of Classroom Hours Per Week

L
2 . . .Number of Laboratory Hours Per Week

P
or CE
0 ....Number of Practicum Per Week
(Practical application or clinical experience per week)

QH
4 ....Number of Quarter Hours Credit

3 2 0 4 ....Total Number of Contact Hours Per Week

CERTIFICATE IN CLERICAL PROCESSING
T-030C

DESCRIPTION

The purpose of the Clerical Processing certificate curriculum is to provide intensive clerical training through the development of such core skills as keyboarding, word processing, and microcomputing.

CURRICULUM BY QUARTERS

Course Title			**Hours Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
BUS	102	Keyboarding	3	2	0	4
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
ENG	111	Grammar Skills	3	0	0	3
			9	**2**	**0**	**10**
SECOND QUARTER						
BUS	103	Document Formatting	3	2	0	4
BUS	250	Word Processing/ WordPerfect	1	4	0	3
ENG	100	Oral Communication	3	0	0	3
			7	**6**	**0**	**10**
THIRD QUARTER						
BUS	104	Document Production/ Word Processing	3	2	0	4
BUS	211	Proofreading and Filing	2	0	3	3
ENG	101	Introduction to Written Communication	3	0	0	3
			8	**2**	**3**	**10**
FOURTH QUARTER						
BUS	105	Advanced Word Processing Applications	3	2	0	4
BUS	240	Word Processing/Word	2	0	3	3
ENG	102	Composition	3	0	0	3
			8	**2**	**3**	**10**

TOTAL CREDIT HOURS: 40

CERTIFICATE IN CUSTOMER SERVICE T-020C
(MARKETING/RETAILING)

DESCRIPTION

The purpose of the Customer Service certificate curriculum is to prepare students for employment in positions that interact with customers.

CURRICULUM BY QUARTERS

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
ENG 100	Oral Communication	3	0	0	3
BUS 232	Sales Development	3	0	0	3
		6	**0**	**0**	**6**
SECOND QUARTER					
BUS 100	Basic Keyboarding	3	0	0	3
ENG 111	Grammar Skills	3	0	0	3
		6	**0**	**0**	**6**
THIRD QUARTER					
BUS 131	Human Relations Skills in Organizations	3	0	0	3
EDP 103	Introduction to Microcomputing (DOS)	3	0	0	3
		6	**0**	**0**	**6**

TOTAL CREDIT HOURS: 18

CERTIFICATE IN DIESEL VEHICLE MAINTENANCE
V-013C

DESCRIPTION

The Diesel Vehicle Maintenance certificate curriculum provides an opportunity for developing the basic knowledge and skills needed in diesel vehicle maintenance. Manual skills are developed in practical shop work.

CURRICULUM BY QUARTERS

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
DVM	1110	Introduction to Diesel	1	0	3	2
DVM	1111	Vehicle Servicing	3	0	9	6
DVM	1112	Basic Electricity	2	0	3	3
DVM	1113	Air Brakes	2	0	3	3
			8	**0**	**18**	**14**
SECOND QUARTER						
DVM	1114	Diesel Engines	4	0	15	9
DVM	1115	Drive Trains	2	0	6	4
ELN	1110	Basic Electronics	1	0	3	2
			7	**0**	**24**	**15**
THIRD QUARTER						
DVM	1116	Suspension and Steering	2	0	6	4
DVM	1117	Truck Charging and Starting Systems	2	0	6	4
DVM	1119	Diesel Fuel Systems	2	0	6	4
WLD	1101	Basic Gas and Arc Welding	1	0	3	2
			7	**0**	**21**	**14**
FOURTH QUARTER						
DVM	1118	Truck Electrical Systems	1	0	6	3
DVM	1120	Diesel Truck Maintenance	2	0	6	4
DVM	1121	Truck Air Conditioning	2	0	3	3
			5	**0**	**15**	**10**

TOTAL CREDIT HOURS: 53

CERTIFICATE IN GENERAL TECHNOLOGY CURRICULUM CORE T-201

DESCRIPTION:

The General Technology Curriculum Core is designed as a career mobility program for technical students to acquire the general education and related courses in subject areas such as humanities; communications; social sciences; general computer studies; and theoretical and applied sciences such as biology, chemistry, physics and mathematics that are foundation courses to specific curriculums in the technical field. After completion of this certificate curriculum, the student has job skills for occupations requiring communications skills and/or science and mathematics. The student may take this program as the first level in a specific technical curriculum as an intended objective component of that technical curriculum. Students may also take this program for transfer to a technical curriculum at another community college system institution either prior to or concurrently with enrollment at the institution which they intend to pursue or are pursuing a technical curriculum degree.

JOB OPPORTUNITIES

Lab Assistant, Research
Technician's Assistant
Employment Clerk
Customer Service Representative
Admissions Evaluator (Education)

CATEGORY ....Credit Hours

General Education 18

Course Title		Hours Per Week		
		C	L	QH
ENG 100	Oral Communications	3	0	3
ENG 101	Introduction to Written Communication	3	0	3
ENG 102	Composition	3	0	0
ENG 115	Appreciation of Literature	3	0	3
ENG 206	Communications	3	0	3
PSY 101	Psychology	3	0	3
PSY 102	General Psychology	5	0	3
PSY 108	Abnormal Psychology	5	0	5
PSY 110	Lifespan Psychology	3	0	3
PSY 111	Abnormal Behavior	3	0	3
SOC 103	Sociology	3	0	3
SOC 105	Families in American Culture	3	0	3

Courses from the above list must be taken to total 18 quarter credit hours.

Related Courses 21

Students will choose an additional 21 hours from a list of approved courses according to career aspirations.

Electives 6

Students must choose electives totaling at least six quarter hours credit from the following areas in accordance with their career goals: humanities; communications; social sciences; and theoretical and applied sciences such as biology, chemistry, physics, math, and general computer studies.

CERTIFICATE IN IMAGING TECHNOLOGY - COMPUTERIZED TOMOGRAPHY T-223C

DESCRIPTION

Individuals entering this curriculum must be registered or registry-eligible radiologic technologists (by the American Registry of Radiologic Technologists).

Imaging technology, a specialty for radiographers, is an advanced allied health career which prepares the individual to use specialized equipment to visualize the internal body structures and to image the blood vessels. Graduates gain knowledge and skills at an entry level of proficiency in cardiovascular and vascular techniques, computed tomography and magnetic resonance imaging. The imaging technologist works in conjunction with physicians in performing special diagnostic procedures. The technologist, through academic and clinical studies, is prepared to provide patient care while performing the advanced noninvasive/invasive radiographic procedures.

Imaging technologists may find employment in hospitals and facilities where vascular/interventional, cardiovascular/interventional, computerized tomography scanning, and magnetic resonance imaging are performed. Responsibilities would include operation of advanced radiographic and other specialty equipment, emergency patient care, professional communication, quality assurance, and radiation protection.

CURRICULUM BY QUARTERS

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
RAD 201	CT Physics and Instrumentation	2	0	0	2
RAD 204	CT Procedures	3	0	0	3
RAD 214	Introduction to CT Imaging	0	0	24	8
		5	**0**	**24**	**13**
SECOND QUARTER					
RAD 228	Clinical Internships	3	0	27	12
		3	**0**	**27**	**12**

TOTAL CREDIT HOURS: 25

CERTIFICATE IN IMAGING TECHNOLOGY - MAGNETIC RESONANCE IMAGING T-223M

DESCRIPTION

Individuals entering this curriculum must be registered or registry-eligible radiologic technologists (by the American Registry of Radiologic Technologists).

Imaging technology, a specialty for radiographers, is an advanced allied health career which prepares the individual to use specialized equipment to visualize the internal body structures and to image the blood vessels. Graduates gain knowledge and skills at an entry level of proficiency in cardiovascular and vascular techniques, computed tomography and magnetic resonance imaging. The imaging technologist works in conjunction with physicians in performing special diagnostic procedures. The technologist, through academic and clinical studies, is prepared to provide patient care while performing the advanced noninvasive/invasive radiographic procedures.

Imaging technologists may find employment in hospitals and facilities where vascular/interventional, cardiovascular/interventional, computerized tomography scanning, and magnetic resonance imaging are performed. Responsibilities would include operation of advanced radiographic and other specialty equipment, emergency patient care, professional communication, quality assurance, and radiation protection.

CURRICULUM BY QUARTERS

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
RAD 202	MRI Physics and Instrumentation	2	0	0	2
RAD 215	Introduction to MR Imaging	3	0	27	12
		5	**0**	**27**	**14**
SECOND QUARTER					
RAD 225	MRI Practicum	2	0	30	12
		2	**0**	**30**	**12**

TOTAL CREDIT HOURS: 26

CERTIFICATE IN MANUFACTURING ENGINEERING TECHNOLOGY T-050C

DESCRIPTION:

The primary objective of the Manufacturing Engineering Technology curriculum is the training of personnel to assist the engineer or small industry in planning, tooling, operating, servicing, and supervising manufacturing operations. This curriculum provides a basic background of mechanical and related theory, with specific skills in the use of manufacturing and testing equipment. Students are given experience in operating and servicing machines, accompanied by general education and management courses.

A graduate of this curriculum may qualify for an entry position in one of several manufacturing functions: methods, analysis, production scheduling, quality control, materials testing, plant layout, time study, machine tooling, maintenance, and equipment and instrument work.

The Manufacturing Engineering Technology certificate curriculum is targeted at persons employed in design and manufacturing-related industries. The primary objective of this program is the development of the student's mechanical analytical abilities required for advancement. The program provides the foundation to handle higher-level technical skills in the ever-advancing technological industrial environment.

CURRICULUM BY QUARTERS

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
DFT 101	Technical Drafting I	1	0	3	2
MAT 101	Technical Mathematics I	5	0	0	5
		6	**0**	**3**	**7**
SECOND QUARTER					
ENG 100	Oral Communications	3	0	0	3
BUS 240	Technical Mathematics II	5	0	0	5
		8	**0**	**0**	**8**
THIRD QUARTER					
MEC 203	Welding Processes	2	0	3	3
PHY 111	Physics-Mechanics	3	2	0	4
		5	**2**	**3**	**7**
FOURTH QUARTER					
ENG 101	Introduction to Written Communication	3	0	0	3
MEC 104	Applied Mechanics	5	0	0	5
		8	**0**	**0**	**8**
FIFTH QUARTER					
MEC 205	Strength of Materials	3	2	0	4
PHY 113	Physics-Electricity	3	2	0	4
		6	**4**	**0**	**8**

TOTAL CREDIT HOURS: 38

CERTIFICATE IN MICROCOMPUTER SYSTEMS TECHNOLOGY T-192C

DESCRIPTION

The Certificate in Microcomputer Systems Technology is designed for individuals desiring an introduction to software application programs.

CURRICULUM BY QUARTERS

Course Title			Hours Per Week C	L	P	QH
FIRST QUARTER						
BUS	100	Basic Keyboarding	3	0	0	3
EDP	102	Microcomputing Concepts	3	0	0	3
			6	**0**	**0**	**6**
SECOND QUARTER						
EDP	104	Text Processing I	3	0	0	3
EDP	171	Alternative Operation Systems I	3	0	0	3
			6	**0**	**0**	**6**
THIRD QUARTER						
EDP	150	Data Base Management Systems	3	0	0	3
EDP	152	Financial Spreadsheets Operations I	3	0	0	3
			6	**0**	**0**	**6**

TOTAL CREDIT HOURS: 18

CERTIFICATE IN REAL ESTATE
(Technical Specialty) T-166

DESCRIPTION

The purpose of the Real Estate (Technical Specialty) certificate curriculum is to provide the prelicensing education requirements needed for real estate salespersons and brokers.

The courses required by the North Carolina Real Estate Commission for prelicensing which are covered in this curriculum are Fundamentals of Real Estate, Real Estate Law, Real Estate Finance, and Brokerage Operations. In addition to these courses, Real Estate Math is also included.

After successful completion of Fundamentals of Real Estate, an individual may make application with the Real Estate Commission to take the prelicensing real estate salesperson examination. After successful completion of all the courses required by the Real Estate Commission, an individual may make application with the Commission to take the real estate prelicensing broker examination.

Employment opportunities are available in real estate firms as salespersons or brokers as well as a real estate broker in one's own business.

CURRICULUM

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
BUS 111	Real Estate Math	3	0	0	3
BUS 162	Fundamentals of Real Estate	5	0	0	5
BUS 164	Real Estate Law	5	0	0	5
BUS 165	Real Estate Brokerage	3	0	0	3
BUS 209	Real Estate Finance	5	0	0	5
		21	**0**	**0**	**21**

TOTAL CREDIT HOURS: 21

CERTIFICATE IN REAL ESTATE APPRAISAL T-224

DESCRIPTION

The purpose of the Real Estate Appraisal certificate curriculum is to provide the prelicensing and the precertification appraisal education requirements approved by the N.C. Real Estate Commission.

The courses required by the N.C. Real Estate Commission for prelicensing as a state-licensed appraiser are covered in this curriculum. These courses are Introduction to Real Estate Appraisal, Valuation Principles and Procedures, and Applied Residential Property Valuation.

The courses required by the N.C. Real Estate Commission for precertification as a state-certified appraiser are also provided. These courses are Introduction to Income Property Appraisal, Advanced Income Capitalization Procedures, and Applied Income Property Valuation. A good math background is very important in this program. It is recommended that a student have mastered competencies found in a basic algebra course before taking Advanced Income Capitalization Procedures.

The courses required for the state-licensed appraiser and the state-certified appraiser must be completed in sequential order.

In addition to meeting the education requirements to become a state-licensed appraiser and/or a state-certified appraiser, an individual must pass the appraisal examinations given by the N.C. Real Estate Commission and meet the appraisal experience requirements. A state-licensed or state-certified appraiser will be able to identify himself or herself to the public as being state-licensed and/or state-certified, and will be qualified to perform appraisals in federally related transactions.

CURRICULUM

Course Title		**Hours Per Week**			
		C	**L**	**P**	**QH**
REA 100	Intro. to Real Estate Appraisal	3	0	0	3
REA 101	Valuation Principles and Procedures	3	0	0	3
REA 102	Applied Residential Property Valuation	3	0	0	3
REA 200	Intro. to Income Property Appraisal	3	0	0	3
REA 201	Advanced Income Capitalization Procedures*	3	0	0	3
REA 202	Applied Income Property Valuation	3	0	0	3
		18	**0**	**0**	**18**

*For students who are weak in math, Algebra I may be recommended before taking this course.

TOTAL CREDIT HOURS: 18

CERTIFICATE IN WELDING V-050C

DESCRIPTION:

The Welding certificate curriculum gives students sound knowledge of the principles, methods, techniques, and skills essential for successful employment in the welding field and metals industry. Welders join metals by applying intense heat, and sometimes pressure, to form a permanent bond between intersecting metals.

Welding offers employment in practically any industry: shipbuilding, automotive, aircraft, guided missiles, heavy equipment, railroads, construction, pipefitting, production shops, job shops, and many others.

CURRICULUM BY QUARTERS

Course Title		Hours Per Week C	L	P	QH
FIRST QUARTER					
WLD 1120	Oxyacetylene Welding and Cutting	2	0	6	4
WLD 1129	Basic Gas Metal Arc Welding	2	0	9	5
		4	**0**	**15**	**9**
SECOND QUARTER					
DFT 1117	Blueprint Reading: Welding	0	0	3	1
WLD 1121	Basic Arc Welding	4	0	15	9
		4	**0**	**18**	**10**
THIRD QUARTER					
WLD 1123	Inert Gas Welding	1	0	6	3
WLD 1124	Advanced Arc Welding	3	0	12	7
		4	**0**	**18**	**10**
FOURTH QUARTER					
WLD 1113	Mechanical Testing and Inspection	1	0	3	2
WLD 1126	Advanced Inert Gas Welding	3	0	9	6
WLD 1128	Welding Procedures and Practices	1	0	6	3
		5	**0**	**18**	**11**

TOTAL CREDIT HOURS: 40

N. C. FUNERAL DIRECTOR CERTIFICATE CURRICULUM
T-057C

Note:

This academic program is designed to meet specific North Carolina state needs. It is not accredited by the American Board of Funeral Service Education. Students graduating from this curriculum are not eligible to take the National Board Examination, nor any state board examination for which graduation from an ABFSE accredited program is required.

DESCRIPTION

The Funeral Director Certificate curriculum provides students with the opportunity to acquire the funeral directing education necessary to become proficient in basic funeral directing skills.

Graduates of the certificate curriculum will qualify to take the North Carolina Funeral Director's Examination; and if successful, following a one-year internship at a North Carolina funeral home, will be awarded a North Carolina Funeral Director's License.

Upon completion of the program, the student will receive a certificate of achievement.

Forsyth Technical CommunityCollege/
Fayetteville Technical Community College

CURRICULUM BY QUARTERS

Course Title			**Hours Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
BUS	115	Business Law I	3	0	0	3
ENG	100	Oral Communication	3	0	0	3
FSE	101F	Introduction to Funeral Service	3	0	0	3
FSE	115F	Funeral Service Law	3	0	0	3
			12	**0**	**0**	**12**
SECOND QUARTER						
BUS	116	Business Law II	3	0	0	3
FSE	121F	Funeral Service Practices	3	0	0	3
FSE	245F	Pathology I	3	0	0	3
PSY	101	Psychology	3	0	0	3
			12	**0**	**0**	**12**
THIRD QUARTER						
FSE	224F	Funeral Home Operations	4	0	0	4
FSE	247F	Funeral Counseling	3	0	0	3
SOC	103	Sociology	3	0	0	3
			10	**0**	**0**	**10**
FOURTH QUARTER						
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
PSY	254F	Grief Psychology	5	0	0	5
			8	**0**	**0**	**8**
FIFTH QUARTER						
BUS	120	Accounting I	4	0	3	5
BUS	200	How to Start Your Own Business	3	0	0	3
			7	**0**	**3**	**8**

TOTAL CREDIT HOURS: 50

Technical Specialty Diploma Curriculum

IMAGING TECHNOLOGY DIPLOMA IN VASCULAR/ CARDIOVASCULAR INTERVENTIONAL TECHNOLOGY T-233D

DESCRIPTION

Individuals entering this curriculum must be registered or registry-eligible radiologic technologists (by the American Registry of Radiologic Technologists).

Imaging technology, a specialty for radiographers, is an advanced allied health career which prepares the individual to use specialized equipment to visualize the internal body structures and to image the blood vessels. Graduates gain knowledge and skills at an entry level of proficiency in cardiovascular and vascular techniques, computed tomography and magnetic resonance imaging. The imaging technologist works in conjunction with physicians in performing special diagnostic procedures. The technologist, through academic and clinical studies, is prepared to provide patient care while performing the advanced noninvasive/invasive radiographic procedures.

Imaging technologists may find employment in hospitals and facilities where vascular/interventional, cardiovascular/interventional, computerized tomography scanning, and magnetic resonance imaging are performed. Responsibilities would include operation of advanced radiographic and other specialty equipment, emergency patient care, professional communication, quality assurance, and radiation protection.

CURRICULUM BY QUARTERS

Course	Title	Hours Per Week C	L	P	QH
FIRST QUARTER					
ENG 101	Introduction to Written Communication	3	0	0	3
RAD 231	Patient Care and Monitoring	3	0	0	3
RAD 235	Equipment Instrumentation	3	0	0	3
RAD 236	Radiographic Pharmacology	2	0	0	2
RAD 239	Clinical Experience I	0	2	21	8
		11	**2**	**21**	**19**
SECOND QUARTER					
BIO 169	Fundamentals of Disease Processes	4	0	0	4
ENG 102	Composition	3	0	0	3
RAD 240	General Vascular Imaging	4	0	0	4
RAD 249	Clinical Experience II	0	0	21	7
		11	**0**	**21**	**18**
THIRD QUARTER					
ENG 103	Technical Report Writing	3	0	0	3
RAD 253	Cardiovascular Imaging	4	0	0	4
RAD 255	Image Evaluation I	2	0	0	2
RAD 259	Clinical Experience III	0	0	24	8
		9	**0**	**24**	**17**
FOURTH QUARTER					
RAD 260	Quality Assurance	3	0	0	3
RAD 262	Image Evaluation II	2	0	0	2
RAD 269	Clinical Experience IV	0	0	30	10
		5	**0**	**30**	**15**

TOTAL CREDIT HOURS: 69

Course Descriptions

COURSE DESCRIPTIONS

ACA 100 3 0 0 3
The Microcomputer as a Study Tool
This course is designed to enable a student to become familiar with the microcomputer and commercially prepared software. Prerequisite: none.

ACA 109 2 0 0 2
Student Success Skills
This course is designed to prepare the "at risk" student to be successful in the learning process at FTCC. Prerequisite: must have a Pretechnical advisor.

ACA 110 3 0 0 3
Study Skills
The objective of this course is to help the student determine achievement levels and learning style, plan learning strategy, and develop learning skills necessary for effective academic success. Opportunity for self-assessment will be provided through standardized tests and individual profile interpretation. A variety of study techniques will be presented, with special emphasis on using textbooks properly, taking and organizing notes, making and using flash cards, developing effective examination skills, and library techniques. Prerequisite: none.

AHR 1102 6 0 9 9
Fundamentals of Refrigeration
The course includes identification, selection, and use of hand, measuring and special refrigeration tools; use of power drills, grinders, and pipe threaders; and use of copper tubing, fittings, and tubing fabrication. Also included in the course are physics related to refrigeration; the basic refrigeration cycle; classification, characteristics, and properties of refrigerants; and types, purpose, and principles of operation of compressors, condensers, receivers, and evaporators. The assembly and operation of a basic refrigeration system, leak checking, evacuating, and charging, compressor operational checks, and system trouble analysis are covered. Prerequisite: none.

AHR 1102A 3 0 3 4
Fundamentals of Refrigeration (Part I)
This course is the first of a two-part course and it includes identification, selection, and the use of hand, measuring and special refrigeration tools; use of power drills, grinders, and pipe threaders; and use of copper tubing, fittings, and tubing fabrication. Also included in the course are physics related to refrigeration; the basic refrigeration cycle; classification, characteristics, and properties of refrigerants; and types, purpose, and principles of operation of compressors, condensers, receivers, and evaporators. The assembly and operation of a basic refrigeration system, leak checking, evacuating, and charging, compressor operational checks, and system trouble analysis are covered. Prerequisite: none.

AHR 1102B 3 0 6 5
Fundamentals of Refrigeration (Part II)
This course is the continuation of AHR 1102A. Prerequisite: AHR 1102A.

AHR 1103 6 0 12 10
Domestic and Commercial Refrigeration
The course covers types and operating principles of domestic hermetic units, domestic absorption units, operation and trouble analysis of hermetic electrical components and circuits, repair and maintenance of hermetic units, calculation of heat loads, and equipment selection and system balance. The course covers operating principles, installation, and maintenance of the following: floats, automatic and thermostatic expansion valves, thermostatic and pressure motor controls, heat exchangers, oil separators, driers, suction filters, and minor accessories. Also included are the installation, operation, service, and trouble analysis of the following equipment: walk-in coolers, display cases, frozen food cabinets, reach-in cabinets, water coolers, ice makers, multiple compressors, and evaporator system operations. Prerequisite: AHR 1102.

AHR 1103A 3 0 6 5
Domestic and Commercial Refrigeration (Part I)
This course is the first of a two-part course and it covers types and operating principles of domestic hermetic units, domestic absorption units, operation and trouble analysis of hermetic electrical components and circuits repair and maintenance of hermetic units, calculation of heat loads, and equipment selection and system balance. The course covers operating principles, installation, and maintenance of the following: floats, automatic and thermostatic expansion valves, thermostatic and pres-

sure motor controls, heat exchangers, oil separators, driers, suction filters, and minor accessories. Also included are the installation, operation, service, and trouble analysis of the following equipment: walk-in coolers, display cases, frozen food cabinets, reach-in cabinets, water coolers, ice makers, multiple compressors, and evaporator system operations. Prerequisite: AHR 1102A & AHR 1102B.

AHR 1103B 3 0 6 5
Domestic and Commercial Refrigeration (Part II)
This course is the continuation of AHR 1103A. Prerequisite: AHR 1103A.

AHR 1104 5 0 3 6
Air Conditioning Controls I
The course includes theory of electrical and electronic controls; principles of operation, application, connection, and adjustment; use of pressure regulators and electrical thermostats, dual thermostats, heating-cooling thermostats and humidistats, valves, dampers, pilot positioners, and two-position controls. The principles of operation, application, wiring, and adjusting of controls are covered. Prerequisite: none.

AHR 1105 6 0 9 9
Principles of Air Conditioning
The course provides an introduction to air conditioning, psychrometrics, principles of load estimating, applied load estimating, residential and commercial equipment, and balancing the system. Prerequisite: none.

AHR 1106 3 0 0 3
Air Conditioning Controls II
The course covers theory of pneumatic controls, principles of operation, application, connection and adjustment, pressure regulators and pneumatic thermostats, dual thermostats, heating-cooling thermostats, humidistats, valves, dampers and pilot positioners, non-bleed controllers, and two-position controls. The principles of operation, application, wiring, and adjusting of controls are covered. Prerequisite: AHR 1104.

AIB 202 4 0 0 4
Principles of Banking
This course presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may acquire a broad and operational perspective. It reflects the radical changes in banking policy and practice which have occurred in recent years. Topics covered are banks and the monetary system, negotiable instruments, the relationship of the commercial bank to its depositors, types of bank accounts, the deposit function, the payments function, bank loans and investments, other banking services (trust, international, and safe deposit), bank accounting and marketing, external and internal controls, and the public service obligation of banks. Prerequisite: none.

AIB 203 4 0 0 4
Bank Investments
AIB's bank investments course covers the sources and use of bank funds and the place of investment in the overall scheme of bank operations. Especially important are the relationship of investments to business and the unique functions, advantages, and purpose served by a wide range of securities. Investment terminology is covered in detail. Prerequisite: none.

AIB 205 4 0 0 4
Bank Management
This course presents new trends which have emerged in the philosophy and practice of management. The study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management. It should be noted that the course is not one of personnel management but rather of business management. It touches on objectives, planning, structure, control, and the interrelationship of various bank departments. Since case study is becoming well established as an effective management learning technique, the course also uses illustrative cases. Prerequisite: none.

AIB 209 4 0 0 4
Installment Credit
This course emphasizes the pragmatic "how-to" details of installment credit. Topics covered are principles of credit evaluation, open-end credit, marketing bank services, collection policies and procedures, legal aspects, financial statement analysis, direct and indirect installment lending, leasing and other special situations, installment credit department management, insurance and rate structure, and yields. Prerequisite: none.

AIB 210 4 0 0 4
Money and Banking
This course presents the basic economic principles most closely related to the subject of money and banking in a context of topics of interest to present and prospective bank management. The course stresses the

practical application of the economics of money and banking to the individual bank. Some of the subjects covered include structure of the commercial banking system; the nature and functions of money; banks and the money supply; cash assets and liquidity management; bank investments, loans, earnings, and capital; the Federal Reserve System and its policies and operations; Treasury Department operations; and the changing international monetary system. Prerequisite: none.

AIB 231 4 0 0 4
Financial Markets & Institutions
Students will study the role of financial intermediaries, both depository institutions and non-depository institutions, found in the U.S. market and such foreign markets as Japan, Germany and the United Kingdom. Students will examine how the world's financial institutions manage their assets and liabilities and what instruments support that management. Markets for government debt, corporate securities, mortgages and derivative securities will be covered. Prerequisite: none.

AIB 233 4 0 0 4
Analysis of Financial Statements
This course is divided into two main sections: characteristics of financial statements and financial statement analysis. The first section serves as a useful review of basic accounting principles for those students who have studied accounting. For those who have not, this section provides the minimum accounting background necessary for profitable study of financial statement analysis. (It should be emphasized, however, that Analysis of Financial Statements is an advanced course and difficult for students with little background in accounting.) The second section of the course covers goals, methods, and tools of analysis; analysis of profit and loss, accounts receivable, inventories, and balance sheets; the relationship of balance sheet accounts to sales and to projected statements and cash budgets. Prerequisite: BUS 120.

AIB 235 3 0 0 3
Loan and Discount
This course presents the essential facts about promissory notes, including calculating interest and discounting commercial paper; guaranties; general collateral agreements; examining and processing documents accompanying notes secured by stocks, bonds, and savings account passbooks; and the concepts of attachment, perfection, priority, default, and foreclosure. The course uses programmed instruction and several simulation exercises. Prerequisite: none.

AIB 236 4 0 0 4
Trust Functions and Services
This course provides an overview of many of the generally accepted principles of the law of estates, trusts, and agencies as it takes the student on a step-by-step study of trust functions and services encountered in the daily operation of a trust department. Prerequisite: AIB 202.

AIB 237 4 0 0 4
International Banking
This course presents the basic framework and fundamentals of international banking: how money is transferred from one country to another, how trade is financed, what the international agencies are and how they supplement the work of commercial banks, international lending, and how money is changed from one currency to another. Prerequisite: none.

AIB 238 4 0 0 4
Law and Banking
This course is designed not only to present an introduction to basic commercial law, but to relate it more specifically to banking and bank transactions. Topics include contracts, agency and partnerships, corporations, real property, personal property and sales, the Uniform Commercial Code, negotiable instruments and bank collections, and secured financing. Prerequisite: none.

AIB 239 4 0 0 4
Marketing for Bankers
This course presents marketing as a broad concept, far more complex than public relations, advertising, and personal selling, which are important components of marketing but are not individually or collectively the equivalent of marketing. It is designed for bankers who are unacquainted with marketing and deals with concepts and philosophies of marketing, marketing information, research, and target; the marketing mix (product strategy, distribution strategy, advertising and sales promotion, personal selling, and pricing strategy); and the methods of marketing planning. Prerequisite: none.

ARC 104 2 0 0 2
Architectural Materials and Methods I
This course emphasizes materials used in residential construction. Field trips to con-

struction sites and study of manufacturer's literature and specifications for materials, properties, standard sizes of materials, and construction techniques are included. Prerequisite: none.

ARC 105 3 0 0 3
Architectural Materials and Methods II
This course emphasizes materials used in the construction of commercial structures. Field trips to construction sites and study of manufacturer's literature and specifications for materials, properties, standard sizes of materials, and construction techniques are included. Prerequisite: none.

ARC 106 2 0 6 4
Architectural Drafting I
This course is designed to provide fundamental knowledge of the principles of drafting. Basic skills and techniques of drafting include use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, and orthographic instrument drawings of principal views. Projection problems dealing with principles of descriptive geometry involving points, lines, planes, connectors, and the principles of planning drafting are introduced. Prerequisite: none.

ARC 107 2 0 6 4
Architectural Drafting II
This course develops techniques in architectural lettering, symbols and their interpretation, dimensioning and freehand, and instrument drafting. Drawings of construction details, using appropriate material symbols, connections, sections, scale details, and full-size details are prepared from preliminary sketches. Applications of descriptive geometry used in visualization and analytical solutions of the drafting problems involving auxiliary views, intersections, and developments are also included. Prerequisite: ARC 106 or by permission of department chairperson.

ARC 108 0 0 9 3
Architectural Drafting III
This course includes the development of design and programming skills applied to realistic situations and the introduction to rendering and projections. Prerequisite: ARC 107 or by permission of department chairperson.

ARC 109 3 0 3 4
Architectural Mechanical Equipment
This course provides general study of heating, air conditioning, plumbing and electrical equipment, materials and symbols, building code requirements pertaining to residential and commercial structures, reading and interpretation of working drawings by mechanical engineers, and coordination of mechanical and electrical features with structural and architectural designs. Prerequisite: none.

ARC 150 2 0 6 4
Site Planning
This course provides an introduction to factors influencing placement of buildings on sites and specific analysis of sites in terms of solar, topographic, use, and wind characteristics. Field work in surveying is also included. Prerequisite: none.

ARC 160 5 0 0 5
Elementary Structures for Architects and Builders
This course covers the essential topics in statics and mechanics of materials and provides a sound introduction to structural analysis. The course will cover the use of structural analysis and building design as well as the basic relationships between structures and architectural form. Prerequisite: PHY 111.

ARC 170 2 0 6 4
Presentation Drawing and Model Making
This course is designed to develop students' abilities to produce both architectural presentation drawings and architectural models. Additionally, photographic documentation of drawings and models will be included. Prerequisite: none.

ARC 181 3 0 0 3
History of Architecture and Construction
This course covers the evolution of building development from primitive to modern and the history of architectural construction and design. The principal periods studied include Prehistory, Ancient Egypt and Mesopotamia, Greece, Rome, Romanesque, Gothic, Renaissance, and Early American. Prerequisite: none.

ARC 190 2 0 6 4
Building Codes and Zoning Ordinances
This course is designed to educate students regarding applicable Building Codes and Zoning Ordinances that affect architectural design and land planning. Prerequisite: none.

ARC 219 2 4 0 4
Architectural Portfolio
This course is designed to define employ-

ment opportunities available to architectural technology graduates. Additionally, preparation of marketing materials and presentation strategy will be discussed. Prerequisite: none.

ARC 220 **2 0 9 5**
Architectural Drafting IV
This course covers the drawing of structural plans and details as prepared for building construction, including steel, concrete, and timber structural components. Appropriate details and drawings necessary for construction and fabrication of structural members and reference materials used to provide the draftsman with skills and knowledge in locating data and in using handbooks are also included. Prerequisite: ARC 108 or by permission of department chairperson.

ARC 221 **2 0 9 5**
Architectural Drafting V
This course provides an in-depth approach to the study of architectural drafting, continuing the study of details of construction, and introducing the elements of mechanical and electrical equipment systems and their relationship to a finished building. Prerequisite: ARC 220.

ARC 222 **2 0 9 5**
Architectural Drafting VI
The preparation of the complete set of working drawings for the architectural structure, the preparation of millwork drawings, cabinets and built-in equipment detail drawings, and door, window, and room schedules are required. Site and landscaping plans are studied and drawn. A final assembly of the complete document for construction purposes is required. Prerequisite: ARC 221.

ARC 235 **3 0 3 4**
Codes, Specifications, and Contract Documents
Building codes and their effect in relation to specifications and drawings, the purpose and writing of specifications are studied, along with their legal and practical application to working drawings. Contract documents are analyzed and studied for the purpose of client-architect-contractor responsibilities, duties, and mutual protection. Prerequisite: none.

ARC 236 **3 0 3 4**
Construction Estimating and Field Inspecting
This course provides an interpretation of working drawings for a project, preparation of material and labor quantity surveys from plans and specifications, and approximate and detailed estimates of cost. A study of materials takeoff, labor takeoff, subcontractor's estimates, overhead costs, and bid and contract procedures, and a detailed inspection of the construction by comparing finished work to the specifications are also included. Prerequisite: none.

ART 150 **5 0 0 5**
Art Appreciation
This course is designed as an introduction to the visual arts. It is structured to make the student aware of the role of art in the history of civilization by introducing some of the major monuments of world art. Students are encouraged to expand their knowledge of how various style periods fit into a historical context, and to develop the ability to discern content expressed through art. Questions of aesthetic and design qualities, purpose, meaning, and historical significance are considered in undertaking to broaden and deepen individual appreciation of artistic endeavor. Prerequisite: none.

AUT 1111 **3 0 15 8**
Automotive Body Repair I
The course includes the basic principles of automobile construction, design, and manufacturing; a thorough study of angles, crowns, and forming of steel into the complex contour of the present-day vehicles; and the application of basic principles of straightening, aligning, and the spraying of primer surfaces. Prerequisite: none.

AUT 1112 **3 0 15 8**
Automotive Body Repair II
The course provides a thorough study of the requirements of a metal worker, including the use of essential tools, forming fender flanges and beads, and straightening typical auto body damage. The student begins acquiring skills such as shaping angles, crowns, and contour of the metal of the body and fenders. Metal working and the spraying of primer surfaces are also covered. Prerequisites: AUT 1111. Corequisite: WLD 1130.

AUT 1113 **2 0 12 6**
Metal Finishing and Painting
This course is intended to teach the student the principles and techniques of refinishing auto bodies. Topics covered are paint removal, masking, preparing surfaces, paint selection, spray equipment, and practice spraying. Prerequisite: AUT 1112.

AUT 1114 4 0 9 7
Frame Straightening and Alignment
This course is an introduction to the repair of automobile frames and suspension systems. Instruction will include assessing frame damage, framing, frame straightening equipment, safety, frame straightening, frame repair, and unibody. Prerequisite: AUT 1112.

AUT 1116 3 0 21 10
Automotive and Truck Painting
This course is intended to give the student practice in surface preparation and paint application. The following topics will be covered: review of finishes, surface preparation, undercoats, topcoats, and common painting problems. Prerequisite: AUT 1114.

AUT 1130 2 0 3 3
Basic Electricity
This course is an introduction to DC electricity. Emphasis will be placed on testing basic DC circuits with a DVOM, a 12v test light and a jumper wire. Testing of the battery, cranking system, charging system and related electrical components will be taught. Prerequisite: none.

AUT 1131 2 2 0 3
Introduction to Automobile and Shop Equipment
This course is a general introduction to the automobile, the shop area, shop equipment, and safety. Careers in automotive, basic hand tools, precision measuring tools, test equipment, fasteners, gaskets and reference manuals will also be covered. The student will also learn how to conduct a safety inspection and what the operating procedures of a safety inspection station should be. It will include how to properly fill in reports and how to become licensed. Prerequisite: none.

AUT 1132 1 0 3 2
Automobile Fuel Systems and Carburetors
This is a course on how the internal combustion engine uses gasoline as a fuel. The total fuel system with special emphasis on the six basic circuits of the carburetor will be discussed. Prerequisite: none.

AUT 1133 2 0 6 4
Automobile Brake Systems
This course includes a complete study of drum and disc brakes: their components, operation, and repair. A study of the hydraulic system including overhaul or repair to master cylinders, wheel cylinders, disc brake calipers, and all connecting hydraulic components will be covered. Also included will be information on asbestos, its hazards, how to safely handle it and how to properly collect and dispose of its wastes. The operation and repair of new anti-lock brake systems will be discussed. Prerequisite: none.

AUT 1135 2 0 6 4
Automobile Cranking, Charging, and Motor-Operated Systems
Instruction in the course deals with the operation and repair of the cranking system, charging system (including regulators), and all other motor-operated systems on an automobile. Prerequisite: none.

AUT 1136 1 0 3 2
Automotive Electronics
This course deals with automotive electricity and electronics. Discussed in detail will be semi-conductors and how they are made, principles of operation, and how they can be applied in the control circuits on the automobile. Diagnosis and repair of these circuits will also be covered. Prerequisite: AUT 1130 or by permission of department chairperson.

AUT 1137 1 0 3 2
Automobile Electronic Fuel Injection
This course is designed to give the student the basic knowledge needed to service a fuel injection system. The course includes the theory of operation of the modern EFI systems, diagnosis of EFI problems and servicing. Prerequisite: none.

AUT 1138 2 0 6 4
Automobile Chassis and Suspension
This course covers the principles, functions, diagnosis and repair of all types of automobile suspension and steering systems. Prerequisite: none.

AUT 1139 2 0 6 4
Engine Performance with Diagnostics
The material contained in this course covers breaker point, electronic, and distributorless ignition systems. Electronic engine controls, electronic engine control testing, and oscilloscope testing are included. The testing of the engine for mechanical soundness and for proper fuel mixture will also be covered. Prerequisite: none.

AUT 1140 1 0 3 2
Automobile Wheel Alignment
This course covers the theory of all of the principles of suspension geometry, including all adjustable and nonadjustable align-

ment angles. Also covered are the types of vehicle alignments and the operation of various types of alignment equipment. Prerequisite: none.

AUT 1141 2 0 6 4
Standard Transmissions, Transaxles, and Drive Trains
This course will discuss the theory of operation and repair of standard, 4-speed, overdrive transmission and transaxles in rear-wheel and front-wheel drive automobiles. Theory of operation of the clutch and related components will be discussed. All types of drive line components and axles, their operation and repair will be covered. Prerequisite: none.

AUT 1142 2 0 3 3
Automotive Air Conditioning
This course is a general introduction to the principles of air conditioning and the refrigeration system. Each component in the refrigeration system, its purpose, diagnosis, and repair will be studied. The servicing (evacuation and charging) of all types of automobile refrigeration systems will be covered with special emphasis on the new refrigerant recovery systems. Prerequisite: none.

AUT 1143 2 0 6 4
Basic Engine Operation and Repair
This course will cover the basic operation and repair of the internal combustion reciprrocating engine. The course will include machine work as well as assembly and partial repair such as valve jobs and timing components. Prerequisite: none.

AUT 1144 2 0 3 3
Automotive Emission Controls
This course deals with the automotive emission control system and the effect of automotive emissions on the environment. The theory of operation of all emission control systems, their effect on the pollutants emitted from the automobile, and the diagnosis and repair of these systems will be studied. Prerequisite: none.

AUT 1145 1 0 3 2
Automatic Transmission Servicing
This course will include the theory of basic automatic transmission and torque converter operation. The proper way to service these units, including fluid change, band adjustment, linkage adjustment, and replacement of external components will be covered. Prerequisite: none.

BIO 010 5 0 0 0
Human Anatomy
This course is designed to acquaint students with basic knowledge of human anatomy by tracing system pathways. The student may also gain proficiency in medical and biological terminology. Prerequisite: none.

BIO 107 3 2 0 4
Anatomy and Physiology I
This is an introduction to normal structure and function of the human body. When relevant, clinical applications are made to relate normal structure and function to basic pathological conditions. Students are given the opportunity to employ their assimilated knowledge in class discussion and laboratory work. Laboratory participation introduces additional information which the student gains by participating in various lab exercises and learning experiences. Prerequisite: High school chemistry or CHM 010.

BIO 108 3 2 0 4
Anatomy and Physiology II
This is a continuation of BIO 107, Anatomy and Physiology I, with emphasis on the vascular system, respiratory system, digestive system, urinary system, fluid and electrolyte balance, endocrine system, and reproductive system. Prerequisite: BIO 107.

BIO 115 1 0 0 1
Medical Terminology I
This is the first of a series of two courses in which the student is introduced to terms related to all areas of medical science, hospital service, and paramedical specialties. Terms introduced parallel the topics covered in BIO 107, Anatomy and Physiology I. Prerequisite: none.

BIO 116 1 0 0 1
Medical Terminology II
This is the second of a series of two courses in which the student is introduced to terms related to all areas of medical science, hospital service, and paramedical specialties. Terms introduced parallel the topics covered in BIO 108, Anatomy and Physiology II. Prerequisite: BIO 115.

BIO 120 3 2 0 4
Principles of Biology I
This course begins a study of the basic principles and concepts of living organisms, with emphasis on the chemistry of life, structure and function of the cell, metabolism, cellular respiration, photosynthesis, protein synthesis, and genetics.

Prerequisite: High school chemistry or CHM 010.

BIO 121 3 2 0 4
Principles of Biology II
This course continues a study of the basic principles and concepts of evolution along with the study of structure and function of the animal kingdom, with emphasis on transport, digestion, gas exchange, homeostasis, regulation and reproduction. Prerequisite: BIO 120.

BIO 122 3 2 0 4
Principles of Biology III
This course centers on a study of the basic principles and concepts of ecology, and plant and animal diversity, along with the structure and function of the plant kingdom. Prerequisite: BIO 121.

BIO 169 4 0 0 4
Fundamentals of Disease Processes
The student is introduced to the major processes involved in producing pathological entities and disorders in man and how such states interfere with normal physiology. After this knowledge of diseases and abnormal states is acquired, it is correlated with the more commonly seen pathology in clinical practices. Emphasis will then be placed upon the fundamental principles of microbiology, the relationship of microorganisms to disease, modes of transmission, control, and the etiological agents of infectious diseases. Prerequisites: BIO 107, BIO 108 and enrolled in curriculum.

BIO 201 3 2 0 4
General Zoology
This course is designed to further the concepts of zoology as covered in BIO 120, 121, and 122. Emphasis is placed on animal classification, habitat, and ecological relationships. Prerequisite: BIO 122.

BIO 205 3 2 0 4
General Botany
This course is a study of the plant kingdom, with emphasis placed on plant classification, morphology, life histories, and ecological principles. Prerequisite: BIO 122.

BUS 010 5 0 0 0
Pretechnical Accounting
This course is designed to present an overview of the complete bookkeeping cycle, including journalizing, posting, summarizing, preparing financial statements, and the closing of books. Prerequisite: none.

BUS 030 5 0 0 0
Introduction to Shorthand
This course provides for the introduction to basic shorthand theory, dictation of practice materials and transcription skills, and development of a fluent reading rate. This is an introduction to BUS 106 Shorthand I. Prerequisite: none.

BUS 100 3 0 0 3
Basic Keyboarding
Basic Keyboarding is an introduction to the touch typewriting system on the microcomputer, with emphasis on correct techniques, alphabetic data entry, numeric data entry using the ten-key numeric pad, and proofreading procedures. Prerequisite: none.

BUS 101 5 0 0 5
Introduction to Business
A survey of the business world is presented in this course with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management. Prerequisite: none.

BUS 102 3 2 0 4
Keyboarding
Keyboarding is an introduction to the touch typewriting system, with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Prerequisite: none.

BUS 103 3 2 0 4
Document Formatting
The development of speed and accuracy with further mastery of correct typewriting techniques is the objective of Document Formatting. These skills and techniques are acquired by completing typing projects that include tabulation, manuscripts, correspondence, and business forms. Prerequisite: BUS 102 or the equivalent.

BUS 104 3 2 0 4
Document Production/Word Processing
This course emphasizes production typing problems and speed building. Attention is given to the development of the student's ability to function as an expert typist, producing mailable copies. Documents may be produced at the typewriter or word processor. The production units are tabulation, manuscripts, correspondence, and business forms. Prerequisites: BUS 103 and BUS 250 or BUS 103 and EDP 104B and EDP 114B.

BUS 105 3 2 0 4
Advanced Word Processing Applications
Advanced Word Processing Applications is a continuation of production typing problems and speed building through an office simulation practice set. Mailable copies are required. Prerequisite: BUS 104 or the equivalent.

BUS 109 5 0 0 5
Business Mathematics
Business Mathematics emphasizes fundamental mathematical operations and their application to business problems. Topics covered include sales records, inventories, commissions, markups, depreciation, and interest. Prerequisite: none.

BUS 111 3 0 0 3
Real Estate Math
This course is designed to give students an overview of important topics in real estate mathematics. Topics covered are operations of arithmetic, percents, fractions, measurements, mortgages math, and appraisal math. Prerequisite: none.

BUS 112 3 2 0 4
Machine Transcription I
This course is the first of three courses designed to introduce and develop skills in machine transcription. Skills are developed in operating a transcribing unit and in word processing. Prerequisites: BUS 103, BUS 250, and ENG 102.

BUS 113 3 0 0 3
Vocabulary/Terminology I
This course is designed to develop an understanding of the terminology and vocabulary used in business, technical, and professional offices. Prerequisite: none.

BUS 114 3 0 0 3
Vocabulary/Terminology II
As a continuation of BUS 113, Vocabulary Terminology I, this course emphasizes terminology and vocabulary in the business environment with special emphasis on medical and legal professions as well as word processing. Prerequisite: BUS 113.

BUS 115 3 0 0 3
Business Law I
This course is designed to provide the student an opportunity to learn basic fundamentals of business law, including the judicial system, contract law, sales and consumer protection laws. Prerequisite: none.

BUS 116 3 0 0 3
Business Law II
This course is designed to provide the student an opportunity to learn basic fundamentals of business law, including property, commercial paper, insurance, secured transactions, bankruptcy, agencies, employment, emerging trends and issues. Prerequisite: BUS 115.

BUS 120 4 0 3 5
Accounting I
This course is a study of the principles, techniques, and tools of the accounting process. The areas of instruction include the collecting, summarizing, analyzing, and reporting of financial information with emphasis on the application of the principles learned. Prerequisite: none.

BUS 121 4 0 3 5
Accounting II
This course concentrates on the application of the procedures involved in the recording of receivables, payables, inventories, deferrals, accruals, plant assets, and payrolls. Prerequisite: BUS 120.

BUS 122 4 0 3 5
Accounting III
This course expands the principles and concepts set forth in BUS 120, Accounting I and BUS 121, Accounting II. Manufacturing and job order cost systems, budgetary control, and standard cost systems are major areas of instruction. Additional attention is given to the decision-making process as determined from cost and revenue relationships, management reports, changes in financial position, consolidated statements, and financial statements. Prerequisite: BUS 121.

BUS 128 5 0 0 5
Personal Financial Management
This course covers the basic concepts of personal finance. The student will become familiar with establishing financial objectives, investment risks, financial institutions, investment alternatives, making investment decisions, and estate planning. Prerequisite: none.

BUS 131 3 0 0 3
Human Relations Skills in Organization
This course is a study in how to plan a career, get a job, and become an effective employee through knowledge of and skill in human relations. The student will study these skills through case studies, projects, role playing, lectures, and guest speakers

who have expertise in human relations techniques. Prerequisite: none.

BUS 132 3 2 0 4
Medical Transcription I
This course will provide the basic knowledge, understanding, and skills required to complete medical forms and to transcribe medical dictation. Correct punctuation, capitalization, and spelling will be emphazied. Students should be able to demonstrate competency in the use of dictionaries, Physicians' Desk Reference, and other references. Prerequisite: BUS 103 and MED 102

BUS 133 2 2 0 3
Medical Transcription II
This course is designed to provide additional practice in medical transcription required in a physician's office or hospital record room. Upon completion of this course, students should be able to operate transcription equipment efficiently, demonstrate competency in transcribing medical reports, and apply editing and proofreading skills. Prerequisite: BUS 132.

BUS 141 3 0 0 3
Medical Vocabulary and Terminology
This course provides students with a means to develop an understanding of vocabulary and terminology for clerical employment opportunities in the medical field. Prerequisite: none.

BUS 142 3 0 0 3
Medical Vocabulary and Terminology II
Upon successful completion of this course, students should be able to pronounce, spell, and define medical terms as they pertain to anatomy, physiology, diseases, operations, tumors, drugs, and related descriptive terms. Students will demonstrate the ability to build medical words and to analyze word components. Prerequisite: BUS 141.

BUS 162 5 0 0 5
Fundamentals of Real Estate
This course consists of instruction in fundamental real estate principles and practices, including real estate law, financing, brokerage, closing, valuation, management, and taxation. Instruction is included on residential building construction, property insurance, land use, the real estate market, the North Carolina Real Estate License Law and Rules/Regulations of the North Carolina Real Estate Licensing Board. Prerequisite: none.

BUS 164 5 0 0 5
Real Estate Law
This is a survey course of law as it relates to real estate activities, including the legal aspects pertaining to the sale, purchase, and management of real property. Special emphasis is placed on the legal steps needed to handle real estate transactions from the preparation of the listing contract to the closing statement. Prerequisite: none.

BUS 165 3 0 0 3
Real Estate Brokerage
This course consists of basic instruction in the various aspects of real estate brokerage operations, including establishing a brokerage firm, management concepts and practices, personnel and training, marketing operations, records/bookkeeping systems (including trust account bookkeeping), and financial operations. Prerequisite: BUS 162.

BUS 190 3 0 0 3
Horticultural Business Management
This course is designed to instruct students on how to set up a small business in the area of horticulture. The student will learn various concepts of business management, planning, decision making, and leadership. Prerequisite: none.

BUS 200 3 0 0 3
Starting Your Own Business
This course is designed to teach the student how to develop a comprehensive business plan. The student will learn how to define the business, make the basic decisions needed to begin a business and develop a business plan for the first six months of operation. Prerequisite: none.

BUS 209 5 0 0 5
Real Estate Finance
This course is a study of real estate finance, including an analysis of financial institutions, techniques, and instruments necessary in real estate. Topics of instruction include the source of funds, types of mortgages, roles of government agencies, interest rates, loan costs, closings, and competition in the money market. Prerequisite: none.

BUS 210 5 0 0 5
Business Statistics
This course is designed to introduce students to basic concepts and methods of statistics. Students are taught to summarize data and then employ a decision-making process based on statistical inference. Prerequisite: none.

BUS 211 2 0 3 3
Proofreading and Filing
This course is designed to give introductory instructions in proofreading, filing, tenkey touch, and using a reference manual. Prerequisites: BUS 102 and BUS 250 or EDP 104B.

BUS 212 3 2 0 4
Machine Transcription II
This course is the second of three courses designed to introduce and develop skills in machine transcription. Skills in punctuation, spelling, and typing styles are developed through direct transcription from oral dictation to mailable printed form. Transcription may be done on the typewriter or word processor. Prerequisite: BUS 112.

BUS 213 2 0 0 2
Filing
This course covers the fundamentals of indexing and filing, combining theory and practice by use of miniature letter, filing boxes, and guides. The course includes alphabetic, numeric, and geographic filing as well as records control. It can also be taken in the Learning Center. Prerequisite: none.

BUS 214 5 0 0 5
Administrative Office Procedures
This course is designed to acquaint the student with the responsibilities encountered by an administrative assistant during the workday. The areas of instruction are receptionist's duties, handling the mail, telephone techniques, travel information, telecommunications, office records, purchasing of supplies, and office organization. Prerequisites: BUS 104 and ENG 102.

BUS 215 3 2 0 4
Machine Transcription III
This course is the third of three courses designed to introduce and develop skills in machine dictation and transcription. Skills are developed by the operation of dictating, transcribing, and word processing equipment. Prerequisite: BUS 212.

BUS 221 5 0 0 5
Intermediate Accounting I
This course is a thorough treatment of the field of general accounting, providing a foundation for specialized studies that follow. The course includes the framework of accounting, the balance sheet, income and retained earnings statements, cash, temporary investments, receivables, and inventories. Prerequisite: BUS 122.

BUS 222 5 0 0 5
Intermediate Accounting II
This course is designed to familiarize the student with the objectives of accounting and the principles that have evolved in response to the objectives. The course includes inventories, estimating and valuation, current liabilities, fixed assets, intangible assets, longterm investments, bonds, leases, and pensions. Prerequisite: BUS 221.

BUS 224 3 2 0 4
Advanced Accounting
A study of advanced principles and practices with special emphasis on the development of worksheet techniques for solution of problems. Accounting and reporting for consolidations and not-for-profit organizations are studied in detail. Prerequisite: BUS 227.

BUS 225 3 2 0 4
Managerial Cost Accounting I
This course is a study of the principles, techniques, and tools of the cost accounting processes within the job cost and process cost system. Instruction emphasizes the application of principles learned. Prerequisite: BUS 122.

BUS 226 3 2 0 4
Managerial Cost Accounting II
This course is a continuation of BUS 225, Managerial Cost Accounting I, with emphasis on standard cost principles and procedures, selling and distribution costs, direct costs, budgets, and executive use of cost figures. Prerequisite: BUS 225.

BUS 227 5 0 0 5
Intermediate Accounting III
This course is designed to familiarize the student with the objectives of accounting and the principles that have evolved in response to the objectives. The course includes leases, paid in capital, retained earnings, book value and earnings per share, accounting changes and correction of errors, statement from incomplete records, the statement of changes in financial position, and financial statement analysis. Prerequisite: BUS 222.

BUS 229 2 0 3 3
Taxes
This course is a study and application of federal and state taxes as applied to individuals, partnerships, and corporations. The major emphasis is on the preparation of individual income tax returns. Prerequisite: none.

BUS 230 2 0 3 3
Advanced Taxes
This course is a study and application of federal and state taxes as applied to individuals, partnerships, corporations, "Subchapter S" corporations, and estate and gift taxes. Prerequisites: BUS 121 and BUS 229.

BUS 231D 4 0 0 4
Taxes for Paralegals
(Paralegal Technology) A continuation of study of federal income taxes; income tax withholding; declaration of estimated tax by individuals; preparation of income tax returns for individuals, partnerships, corporations, and fiduciaries. An introduction to property taxes, intangible taxes, sales and use taxes, and N.C. State income taxes. Prerequisite: BUS 229.

BUS 232 3 0 0 3
Sales Development
This course is a study of retail, wholesale, and specialty selling. The emphasis is on mastering the fundamentals of selling. The preparation and execution of a sales demonstration are required. Prerequisite: none.

BUS 233 3 0 0 3
Personnel Management
Personnel management is the study of the principles of organization and the management of personnel. Specific areas of study include procurement, placement, training, performance checking, supervision, remuneration, labor relations, fringe benefits, and security. Prerequisite: none.

BUS 234 3 0 0 3
Sales Management
This course is a continuation of BUS 232, Sales Development. Prerequisite: BUS 232.

BUS 235 5 0 0 5
Business Management
This course is an introduction to the concepts of business and organizational management. Through study in such areas as planning and decision making, organizational structures and behavior, leadership, motivation, and resources control, the student will acquire the skills to analyze and practice good management procedures. Prerequisite: none.

BUS 239 5 0 0 5
Marketing
This course is a study of the principles and problems of marketing goods and services in a free enterprise economy. Topics of instruction include product selection and development, promotion, channels of distribution, and pricing. Prerequisite: none.

BUS 240 2 0 3 3
Word Processing/Word
This is an introductory course designed to instruct the student in the use of a microcomputer to create, edit, store, and print text. In addition to using the equipment, the student will study basic word processing terminology and work flow. Prerequisite: BUS 102.

BUS 242 3 2 0 4
Visual Merchandising
This course is an introduction to basic layout and design of internal commercial displays in retail stores and service institutions. Prerequisite: none.

BUS 245 3 2 0 4
Advertising Using Desktop Graphics
This course is a study of methods and techniques used by advertisers. Some of the topics covered are advantages and disadvantages of using different types of print and broadcast media, planning advertising strategy based on target market and budget, and principles of layout and design for print media. Class activities emphasize designing copy for newspapers, brochures, fliers, signs, and newsletters using the microcomputer. Prerequisite: EDP 103.

BUS 247 3 0 0 3
Business Insurance
This course is a presentation of the basic principles of risk insurance and their application as well as a survey of the various types of insurance. Prerequisite: none.

BUS 250 1 4 0 3
Word Processing/WordPerfect
This course is designed to instruct students in using a word processing system for creating, editing, printing, and storing documents. Through the use of a training workbook, students will learn to produce mailable business documents. Prerequisite: BUS 102.

BUS 262 3 2 0 4
Fashion Merchandising
This course is designed to acquaint the student with fashion, characteristics of style, trends, coordination of color, and design analysis. Prerequisite: none.

BUS 263 3 0 0 3
Retailing I
This course is a study of the role of retailing in our distribution system. Topics of

instruction include the development of present retail practices, functions performed, principles governing effective operation, and managerial problems resulting from current economic and social trends. Prerequisite: none.

BUS 264 3 0 0 3
Retailing II
A continuation of BUS 263, Retailing I. Prerequisite: BUS 263.

BUS 269 3 2 0 4
Auditing I
Auditing is a study of the theory and practices of auditing, including professional standards and rules of conduct. The student will learn the specific techniques of auditing various balance sheet accounts and comparative analysis using rapid calculation procedures. Study will also include detailed audits, internal auditing, and internal control as well as current trends in statement preparation. Prerequisite: BUS 222.

BUS 270 3 2 0 4
Auditing II
This course is a continuation of BUS 269, Auditing I. The emphasis will be on the preparation of audit programs, the application of auditing procedures, the various types of auditors' reports, and other attestation and accounting services. Students will also be required to prepare an audit practice set. Prerequisites: BUS 227 and BUS 269.

BUS 272 3 0 0 3
Principles of Supervision
This course is a study of the basic responsibilities of the supervisor and his or her relationship to supervisors, subordinates, and associates. The methods of supervision and problem-solving techniques are presented through the case study method. Prerequisite: none.

BUS 280 3 0 0 3
Microcomputer Accounting Applications: General Ledger
This course is designed for any student interested in learning to use a general ledger accounting package on the microcomputer. Topics to be covered include chart of account design, transaction entry, posting, closing, correcting, and report generation. Additionally, the relationship of the general ledger to other accounting functions will be covered. Microcomputer simulations will be used to introduce decision making and group planning. Prerequisites: EDP 103 or EDP 109 and BUS 120 or BUS 119.

BUS 281 3 0 0 3
Microcomputer Accounting Applications: Accounts Receivable/Accounts Payable
This course is designed for any student interested in learning to use accounting software packages on the microcomputer. The course will emphasize the fundamentals in setting up a microcomputer accounting system, with particular emphasis on using an accounts receivable and accounts payable. Prerequisite: BUS 280.

BUS 282 3 0 0 3
Microcomputer Accounting Applications: Payroll/Inventory
This course is designed for any student interested in learning to use accounting software packages on the microcomputer. The course will emphasize the fundamentals in setting up a microcomputer accounting system, with particular emphasis on using payroll and inventory programs. Prerequisite: BUS 281.

BUS 1103 3 0 0 3
Small Business Operations
This course is an introduction to business operation. Areas of instruction include basic business law, business forms and records, financial problems, ordering and inventory control, layout of equipment and offices, and employer-employee relations. Prerequisite: none.

BUS 1122 3 0 0 3
Vocational Keyboarding
This course is an introduction to the touch typewriting system on the microcomputer with emphasis on correct techniques, alphabetic data entry, numeric data entry using the ten-key numeric pad, and proofreading procedures. Prerequisite: none.

CAD 151 2 2 0 3
Introduction to AutoCAD
This course is designed to provide fundamental knowledge of the principles of AutoCad. Basic DOS skills will be covered as related to the functional use of CAD application. Corequisite: DFT 101 or permission of department chairperson or have met prerequisite or ARC 106.

CAD 152 1 0 3 2
Computer-Aided Drafting I
This course will give the student advanced training in the use of micro-CAD applications. These applications will use several types of CAD software with an emphasis placed on specific types of drafting projects. Prerequisite: CAD 151 or permission of department chairperson.

CAD 153 2 2 0 3
Computer-Aided Drafting II
This course will instruct the student on setting up 3-D design files and provide instruction and experience in construction and manipulating 3-D figures using a PC based computer. The student will also be introduced to hidden line and surface drawing procedures. Prerequisite: CAD 152.

CAD 154 1 2 0 2
Computer-Aided Drafting III
This course will instruct the student on how to use AutoCad's AME extension. Students will learn how to construct a solid model. Students will be shown how to analyze the model and use paper space and detail the model. Prerequisite: CAD 153.

CAD 155 1 4 0 3
Computer-Aided Drafting Applications
This course provides an overview of types of CAD applications which can be found in the market place. The students will go on several field trips to observe the application process. Students will specialize in one area of interest using either a microcomputer or a mainframe system. Prerequisite: CAD 154.

CAR 1101 5 0 15 10
Carpentry I
The course provides instruction in the principles and practices of frame construction beginning with the foundation sills and including floor joists, subfloors, wall studs, ceiling joists, rafters, bridging, bracing, sheathing, and interior wall partitions. The layout and construction methods of common types of roofs using standard rafter construction, truss construction, post and beam construction, and the application and selection of sheathing and roofing are covered. Consideration is given to the coordination of carpentry work with installation of mechanical equipment such as electrical, air conditioning, heating, and plumbing. Prerequisite: none.

CAR 1102 5 0 15 10
Carpentry II
This course is a continuation of CAR 1101. Prerequisite: CAR 1101.

CAR 1103 5 0 15 10
Carpentry III
This course covers the layout and installation of various types of wood or composition paneling, the layout and installation of cornices, and exterior trim on houses. Also, the installation of windows and doors in rough openings and the installation of hardware are covered. Prerequisite: CAR 1102.

CAR 1105 5 0 15 10
Carpentry IV
Exterior and interior trim and the finish carpentry to complete the general carpentry program are covered as well as materials and methods used in finish carpentry such as exterior cornices, door and window trim, interior flooring, door and window facings, moldings, and cornice construction. Also included are the installation of hardware, construction and installation of built-in equipment and cabinets, and millwork as performed by the general carpenter for building construction. Prerequisite: CAR 1103.

CAR 1114 3 0 0 3
Building Codes
This course covers a study of applicable sections of city, state, and national codes. The course material is correlated with all other carpentry courses. Prerequisite: CAR 1102.

CAR 1115 2 0 0 2
Estimating for Residential Construction
This is a practical course in quantity "take off" from prints of jobs performed by the carpenter. Figuring the quantities of materials needed and costs of building various components and structures will be covered. Corequisite: CAR 1105.

CET 105 0 0 3 1
Computer Tools for Engineering Technology I
This course is the first in a two-course sequence providing an introduction to some of the computational tools available to technicians. The following topics will be covered: numeric notations, use of the scientific calculator, microcomputer use, and the Microsoft Disk Operating System (MSDOS). Prerequisite: none.

CET 106 0 0 3 1
Computer Tools for Engineering Technology II
This is the second course in a two-course sequence providing an introduction to some of the computational tools available to technicians. The following topics will be covered: use of a word processor for preparation of laboratory reports, electronic spreadsheets for data analysis and graphing, and an algorithmic approach to problem solving. Prerequisite: CET 105.

CET 160 3 0 3 4
Assembly Language Programming
This course covers assembly language programming practices and procedures. A typ-

ical industrial computer instruction set is utilized while writing programs centered around industrial control, diagnostics, testing, and computer interfacing applications. Prerequisite: CET 106.

CET 200 4 0 6 6
Microprocessors
This course is an introduction to a typical industrial microprocessor. The theory of operation, architecture, memory, input/output, bus structure, timing and instruction set will be covered. Standard industrial test equipment will be used as an analysis and troubleshooting aid. Prerequisites: CET 160 and ELN 219.

CET 215 4 0 6 6
Mini-Computer Maintenance I
This course is the first in a two-course sequence providing an introduction to the maintenance of a typical industrial mini-computer. The following topics will be covered: overview of computer system organization, instruction set, timing of computer systems, computer diagnostics, and troubleshooting methods. Prerequisite: CET 200.

CET 220 4 0 6 6
Microprocessor Interfacing
This course is an introduction to microprocessor interfacing. The course is designed to familiarize the student with the operation, programming, and connection of interface circuits commonly used with microprocessors. Prerequisites: CET 200, ELN 235.

CET 225 4 0 6 6
Mini-Computer Maintenance II
This course is the second course in a two-course sequence covering the introduction to the maintenance of a typical industrial mini-computer. The following topics will be covered: systems-level programming, timing and performance of computer systems, computer I/O, interrupt systems, direct memory access, and computer diagnostic and troubleshooting methods. Prerequisite: CET 215.

CET 232 4 0 6 6
Computer Peripherals
This course covers the operation and maintenance of the peripheral devices found on a typical industrial micro- or mini-computer. Areas covered include troubleshooting procedures, maintenance techniques, and the operational characteristics of the following common peripherals: video display terminals, printers, modems, disk storage systems, and tape storage systems. Prerequisite: CET 215.

CET 242 2 0 3 3
Concepts of Computer Networking and Data Communications
This course is an overview of the technical aspects of data communications and computer networking. Major topics include terminology, transmission media, modems and modulation, network models, interface standards, packet switching, gateways, LAN components, linking PCs to minis and mainframes, and networking installation. Prerequisites: CET 215 and CET 220.

CHM 010 3 2 0 0
Pretechnical Chemistry
This is an elementary course in chemistry equivalent to a high school level of difficulty. It provides the necessary foundation in chemistry for students who enter (1) a physical science technical curriculum which requires chemistry at the beginning or (2) a technical program based on the biological sciences. Topics and laboratory experiments are planned to teach chemistry which is related to the various chemical aspects of biological science. Laboratory exercises and experiments are designed to teach the fundamentals of chemistry and develop chemical laboratory skills. Prerequisite: none.

CHM 101 4 2 0 5
Chemistry
This course is a study of the physical and chemical properties of substances, chemical changes, elements, compounds, gases, chemical combinations, weights and measurements, and theory of metals, acids, bases, salts, solvents, solutions and emulsions. In addition, it includes the study of carbohydrates, electrochemistry, electrolytes and electrolysis. Industrial and agricultural applications are emphasized. Prerequisite: none.

CHM 103 3 2 0 4
Chemistry—General and Inorganic
This is a general course in inorganic chemistry which will include the study of physical and chemical properties and changes of matter. Specific topics will include elements, compounds, mixtures, chemical reactions, gases, weights and measurements, acids, bases, salts, solvents and solutions. Chemical principles will be discussed which are fundamental to an understanding of life processes. The laboratory

exercises supplement and reinforce material introduced in lecture. Prerequisite: none.

CHM 110 3 2 0 4
General Inorganic Chemistry I
This first course in general inorganic chemistry includes measurements and calculations; properties of matter, elements, compounds and mixtures; atomic structure; the periodic table; types of chemical bonds; chemical nomenclature and formulas. Prerequisite: Algebra and high school chemistry or CHM 010.

CHM 111 3 2 0 4
General Inorganic Chemistry II
This course includes the study of the chemical mole; chemical equations and calculations based on balanced equations; the gaseous state of matter; water and the properties of liquids; solutions, suspensions and colloids; acids, bases and salts; electrochemistry; reaction rates and equilibrium. Prerequisite: CHM 110.

CHM 113 3 2 0 4
General Inorganic Chemistry III
This third and final course in the inorganic sequence involves both an introduction to more complicated chemical concepts and a continuation and expansion of a few topics offered in either CHM 110 or CHM 111. New topics include chemical thermodynamics, metals and metallurgy, coordination compounds, organic chemistry, and biochemistry. Expanded topics previously introduced include electrochemistry, nuclear chemistry, and chemistry of selected elements. Prerequisite: CHM 111.

CHM 121 3 2 0 4
Forensic Chemistry I
This course is a study of the fundamental concepts of chemistry as it relates to forensics. Topics covered include physical and chemical properties of substances, metric measurements, chemical changes, elements, compounds, gases, and atomic structure.

CHM 122 3 2 0 4
Forensic Chemistry I
This course is a study of specialized areas of chemistry specifically related to forensic science. Topics to be covered include properties of light, emission and absorption spectrums, spectrophotometry, gas and liquid chromatography and related topics in organic and biochemistry. Prerequisite: CHM 121.

CJC 101 5 0 0 5
Introduction to Criminal Justice
This is a general course designed to familiarize the student with the philosophy and history of the criminal justice system, including its legal limitations in a democratic republic, a survey of the primary duties and responsibilities of various criminal justice agencies, a delineation of the basic processes of justice, and an orientation relative to criminal justice as a vocation. Prerequisite: none.

CJC 102 5 0 0 5
Criminology
This is a general course designed to introduce the students to the social origins of criminal law, the administration of criminal justice, the causes of criminal behavior, and the prevention and control of crime, including the individual rehabilitation and modification of the social environment. Prerequisite: none.

CJC 103 5 0 0 5
Government—National
Topics covered in this course include English and colonial background, the Articles of Confederation and the framing of the federal constitution, the nature of the federal union, states' rights, federal powers, political parties, and the general organization and functioning of the national government. Prerequisite: none.

CJC 104 5 0 0 5
Government—State and Local
This course is a study of state and local government, including state-federal relationships, the functions and prerogatives of the branches, problems of administration, legal procedures, law enforcement, police power, taxation, revenues, and appropriations. Special attention will be given to North Carolina's government. Prerequisite: none.

CJC 105 5 0 0 5
Introduction to Corrections
This course provides the student with an overview of the correctional system in America, including historical perspectives, contemporary philosophies and the treatment of offenders. The students will gain insight into the North Carolina system including, but not limited to, imprisonment, alternatives to imprisonment, and current issues in corrections.

CJC 110 5 0 0 5
Criminal Personality and Behavior
This course is primarily concerned with

scientific efforts to understand crime and to understand man in relation to crime phenomena. It deals with those definitions and formulations of crime and criminals upon which an adaptation system of criminology must be based. It examines the law as the basic framework within which social deviations of a peculiar character assume their functions as criminal acts and those broad principles upon which a science of criminology must rest. Prerequisite: none.

CJC 115 5 0 0 5
Criminal Law
This course is designed to present a basic concept of criminal law and to create appreciation of the rules under which one lives in our system of government. Prerequisite: none.

CJC 117 3 0 0 3
Constitutional Law
This course is a study of the Bill of Rights as applied to the criminal justice process, the right to counsel; compulsory self-incrimination; the principles of search and seizure; the elements of a fair trial; interpretation of the First Amendment; double jeopardy; and the principle of equal protection of law. Prerequisite: none.

CJC 120 4 0 0 4
Administration of Justice
This course is a review of court systems; procedures from incident to final disposition; the six primary functional areas for the administration of justice to include police, prosecutor, criminal courts, probation, institutions, and parole; and principles of federal, state, and civil laws as they apply to and affect law enforcement. Prerequisite: none.

CJC 122 0 0 10 1
Criminal Justice Practicum
This is a general course designed to provide students with an opportunity to gain, under supervision, work experience in the field of criminal justice, thus providing them motivation and a sense of realism in their field of study. Corequisites: CJC-121, recommendation of department chairperson.

CJC 209 5 0 0 5
Correctional Law
This course is a basic introduction to laws which apply to correctional institutions. Various constitutional law cases pertaining to correction, as well as civil rights legislation, will be covered. The course emphasizes the rights and responsibilities of individuals in confinement, as well as the rights and responsibilities of the state and the personnel supervising the correctional institution. Prerequisite: none.

CJC 210 3 2 0 4
Criminalistics I
This course introduces the student to the scientific tools (resources) that are used in the study of criminal activity. Principles of biology, chemistry, and physics provide the basis for readings, lectures, demonstrations, and experiments to acquaint the student with the processes involved and the significance of the findings in conducting investigations and in the collection and preservation of evidence. Emphasis is placed upon specific types of offenses such as arson, illegal drugs, sex crimes, larceny, burglary, and homicide. Prerequisite: none.

CJC 210 D 5 0 0 5
Criminal Investigation
An introduction to the fundamentals of investigation; crime scene search, recording, collection and preservation of evidence; sources of information; interview and interrogation, case preparation and court presentation. The course also explores various legal elements of specific offenses and provides the student with information useful in supporting those elements in a judicial preceeding. Prerequisite: none.

CJC 211 3 2 0 4
Criminalistics II
This course is a continuation of the study of criminal investigation, including a general survey of the methods and techniques used in modern scientific investigations of crime, with emphasis upon the practical use of these methods by students. Laboratory techniques will be demonstrated, and the student will participate in actual use of the scientific equipment. Prerequisite: CJC 210.

CJC 220 5 0 0 5
Criminal Justice Organization and Administration
This course covers the principles of organization and administration of criminal justice agencies. It includes determination of departmental objectives, policies and procedures for recruiting, selecting and training new personnel and development of organizational charts. Prerequisite: none.

CJC 230 3 0 0 3
Corrections Counseling
This course will introduce the student to the

various models of therapeutic counseling. The class will discuss techniques, principles, and innovations concerning the rehabilitation of confined inmates and offenders in a community setting, describe counseling techniques utilized with offenders, and discuss future trends of corrections rehabilitation. Prerequisite: none.

CJC 232 3 0 0 3
Multicultural Relations in Criminal Justice
This course presents an overview of the impact of multicultural relations as they relate to the field of criminal justice. It will examine such issues as police-community relations, multicultural gender-related views of appropriate behaviors, and police attitudes in dealing with special and ethnic client groups. Prerequisite: none.

CJC 233 5 0 0 5
Penology and Corrections Literature
This course will cover the basic concepts of penal and correctional rationale as used by criminal justice administrators. It includes an historical survey of the principles and practices of punishment including US structures and management procedures and their effect on various types of prisoners. Reform plans are evaluated. Prerequisite: none.

CJC 234 3 0 0 3
Case Management
This course is a study of the supervisory fundamentals in community-based correctional programs. Included will be investigation, reporting, supervision treatment, classification, assessment, use of special programs, and the study of reality therapy and behavior modification techniques. Case work principles will be discussed in relation to community-based corrections. Prerequisite: none.

CJC 241 5 0 0 5
Introduction to Security
This course is an introduction to the history of the various divisions of private protection services and the law, including security guards, detectives, guard dogs, courier services, executive protection, retail loss prevention, alarm monitoring and response and detection of deception. Emphasis is placed on PPS in business and industry rather than on the criminal justice system. Prerequisite: none.

CJC 242 5 0 0 5
Safety and Risk Management
This course will introduce the student to the field of occupational safety and health. Emphasis will placed on OSHA, ANSI, and NFPA standards, and with preventing, as well as reporting, accidents and injuries, and conducting regular inspections to assess potential risks of standards violations. Prerequisite: none.

CJC 243 5 0 0 5
Law of Protective Services
This course will examine the legal areas relevant to the protective services field. Areas covered include search and seizure, arrest, civil and criminal liability, as well as licensing and training requirements. Prerequisite: none.

CJC 244 5 0 0 5
Retail: Security and Risk Prevention
The course will introduce the student to the field of retail security. Topics to be covered include detecting and arresting shoplifters, prevention and detection of employee thefts, assessing security, and loss prevention needs for retail establishments. Prerequisite: none.

CJC 245 5 0 0 5
Industrial Security and Loss Prevention
This course will introduce the student to security and loss prevention in selected industries. Some areas to be covered will be nuclear power plants, hospitals, large industrial manufacturing plants, educational facilities, product distribution centers, and the transportation industry. Prerequisite: none.

CJC 250 5 0 0 5
Criminal Personality and Behavior
This course will bring the individual back into criminology by focusing on understanding individual differences in criminal conduct and recognizing the importance of personal and community factors. It highlights the general personality of criminal behavior and summarizes the theory and research on individual differences in criminal conduct. Prerequisite: none.

CJC 251 5 0 0 5
Justice Issues and the Media
This course offers a study of the portrayal of criminal justice in the mass media, including movies, television, music videos and documentaries. It moves from historical coverage up to current media concepts of music and videos as communication tools. Prerequisite: none.

CJC 252 3 0 0 3
Research in Criminal Justice
A study of basic skills, plus specialized research methods for CJC Students. The course will cover research in the humanities and in government documents with special emphasis on use of law libraries. Prerequisite: none.

CJC 260 3 0 0 3
Ethics in Criminal Justice
Public service professionals are constantly faced with ethical/moral decisions. With increased technology and shifting mores resulting in added pressures and fewer absolutes, those decisions have become at times exceedingly difficult to make. Yet they must be made and made logically. This course studies various ethical questions related to the types of decisions—professional and personal—that public service professionals face. To help them arrive at valid decisions, it also reviews basic ethical thought through the ages and concentrates on logical analyses of such problems. Prerequisite: none.

DFT 101 1 0 3 2
Technical Drafting I
The field of drafting is introduced as the student studies the basic principles of the graphic language. Skills are developed in freehand lettering, geometric figure construction, orthographic and pictorial freehand, and instrument drawing of the principle views of objects as they are represented in the graphic language. Principles of size description are also introduced. Prerequisite: none.

DFT 102 1 0 3 2
Technical Drafting II
This course includes the application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, and the introduction to sections and conventions. Dimensioning practices for details and working drawings as approved by the American Standards Association are covered. Prerequisite: DFT 101.

DFT 103 1 0 3 2
Technical Drafting III
This course is a study of the various techniques employed to produce and render isometric and oblique drawings and isometric, diametric, and trimetric projections. An introduction to screw threads and various fasteners is included. Prerequisite: DFT 102.

DFT 112 3 2 0 4
Drafting—Electromechanical
This course is designed to give the Electromechanical Technology student an introduction to drafting techniques and blueprint reading. The preparation of properly dimensioned rough drawings and sketches will be emphasized. Prerequisite: none.

DFT 204 2 0 3 3
Descriptive Geometry
This course covers a graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems are stressed with analytical verification where applicable. Visualization is stressed on every problem. Prerequisite: DFT 101.

DFT 205 1 0 3 2
Design Drafting I
This course is an introduction to inking, welding symbols and methods of representing and specifying them, and basic design in the study of motion and transfer mechanisms as they relate to power trains. The principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings, simplified drafting practices, and the types and methods of specifying materials and workmanship are integral parts of the course. Prerequisite: DFT 102.

DFT 206 1 0 3 2
Design Drafting II
This course is an introduction to piping drawings and research to solve a problem in design by consulting various manuals, periodicals, and laboratory experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly, and subassembly drawings and specifications are required as a part of the problem. Prerequisite: DFT 205. Corequisite: DFT 260.

DFT 211 3 0 3 4
Mechanisms
This course includes mathematical and drafting room solutions of problems involving the principles of machine elements; a study of motions of linkages, velocities, and acceleration of points within a link mechanism; and layout methods for designing cams, belts, pulleys, gears, and gear trains. Prerequisites: DFT 206, MAT 103, MEC 104.

DFT 212 2 0 6 4
Jig and Fixture Design
This course covers commercial standards,

principles, practices, and tools of jig and fixture design. Individual project and design work to acquaint students with the types of jigs and fixtures and their design is also included in the course. Prerequisites: DFT 211 and DFT 223.

DFT 223 2 0 6 4
Design Drafting III
This course introduces the fundamentals of punches and dies. The electromechanical drawings of printed circuits, wiring diagrams, and schematics are also included. Prerequisite: DFT 206.

DFT 224 2 0 6 4
Product Design
This course brings together the original idea, scientific theory involved, applicable product history, limiting manufacturing boundaries, aesthetic importance, and marketability considered with study given to relative importance and intended design goal using advanced computer graphic applications. Two and three dimensional applications will be used to produce a finished engineering drawing. Prerequisites: DFT 211 and CAD 151.

DFT 260 1 0 3 2
Geometric Dimensioning and Tolerancing
This course covers Standard Drafting Practices per USASIY 14.5. It includes general dimensioning, general application of tolerance and limits, tolerance of position and form, and advantages of true position tolerancing. Prerequisite: DFT 102.

DFT 1101 0 0 3 1
Schematics and Diagrams
This course develops the student's ability to read and interpret blueprints, charts, and instruction and service manuals. Also included in the course is information on the basic principles of lines, views, dimensioning procedures, and notes. Prerequisite: none.

DFT 1104 1 0 3 2
Mechanical Drawing I
This is a course in basic mechanical drawing and covers shop sketching, lettering, alphabet of lines, drafting tools, drafting techniques, orthographic projection, multiview drawings, inclined surfaces, curved surfaces, and hidden lines. Prerequisite: none.

DFT 1105 1 0 3 2
Mechanical Drawing II
This course is a continuation of basic mechanical drawing and covers visualizing, auxiliary views, sectional views, measurements on drawings, dimensioning, working drawings, title blocks and fasteners. Prerequisite: DFT 1104.

DFT 1106 1 0 3 2
Mechanical Drawing III
This course is a continuation of basic mechanical drawing and covers pictorial drawing (isometric, oblique, and perspective), simple assembly drawing and geometric construction. Prerequisite: DFT 1105.

DFT 1107 1 0 3 2
Blueprint Reading
This course includes interpreting and reading blueprints applicable to air conditioning, heating, and refrigeration. The development of an ability to read and interpret floor plans, elevations, sections, and details found on pictorial, perspective, isometric, oblique, and three-view drawings is covered. Prerequisite: none.

DFT 1110 0 0 3 1
Blueprint Reading I
This course covers the principles of interpreting blueprints and trade specifications common to the building trades. The development of proficiency in making three-view and pictorial sketches is included. Prerequisite: none.

DFT 1111 0 0 3 1
Blueprint Reading II
This course covers the principles of interpreting blueprints and specifications common to the building trades. Practice in reading details for grades, foundations, floor plans, elevations, walls, doors, windows, roofs of buildings, and the development of proficiency in making three-view and pictorial sketches, and estimating from blueprints are covered. Prerequisite: none.

DFT 1112 1 0 3 2
Drafting I: Plumbing
This course includes a review of blueprint reading; instruction in the selection, use, and care of basic drafting instruments; single-stroke freehand lettering; orthographic projection consisting of instruments and freehand sketching; and study of dimensioning and note practices with reference to the American Standard Association practices. The methods of reproducing drawings; detail assembly, layout and pictorial drawings; and specifications, parts list, and bill of materials are covered. The drawings of piping include metal pipe, tubing, plastic pipe, pipe joints, tube joints, pipe fittings, and valves; specification of fittings, pipe

threads, and specification of threads; scale layout (two-line drawing) and diagrammatic (single-line drawing), (diagrammatic methods include orthographic, developed, and pictorial); standard symbols; dimensioning of a pipe drawing, and pipe hangers and support. The student's work includes various problems of piping layout to scale. (Note: Forsyth Tech will furnish drafting equipment.) Prerequisite: DFT 1110.

DFT 1113 0 0 3 1
Blueprint Reading: Electrical
This course covers the interpretation of schematics, diagrams, and blueprints applicable to electrical installation with emphasis on electrical plans for domestic and commercial installations using appropriate symbols and notes according to the applicable codes. Prerequisite: none.

DFT 1117 0 0 3 1
Blueprint Reading: Welding
This course is a study of mechanical blueprints and sketches in which welding procedures are indicated. Interpretation, use, and application of welding symbols, abbreviations, and specifications are emphasized. Prerequisite: none.

DVM 1110 1 0 3 2
Introduction to Diesel
This course is designed to familiarize the student with the basic engine components and the principles of both four- and two-cycle engine theory and operation. Competency will be demonstrated in the identification, operation and performance of selected diesel engines and components. Competency will be demonstrated in the identification and use of hand tools and shop equipment. Introduction to microcomputers as related to shop personnel will be presented. Prerequisite: none.

DVM 1111 3 0 9 6
Vehicle Servicing
This course will provide instruction in the theory and techniques of servicing heavy-duty diesel trucks. Competency will be demonstrated in servicing the engine, lubrication, cooling, intake, exhaust, chassis and power train components. Upon satisfactory completion of the course, competency in adjustment and operational theory of brakes, clutches, tires, rims and belts will be demonstrated. Prerequisite: none.

DVM 1112 2 0 3 3
Basic Electricity
This course is designed to familiarize the student with DC current, batteries and truck electrical components. Competency will be demonstrated in the testing and troubleshooting of batteries, starting systems, charging systems and related electrical components. Prerequisite: none.

DVM 1113 2 0 3 3
Air Brakes
This course is a study of the function and design of the braking system used on diesel trucks. Upon completion of this course a student will demonstrate competency in troubleshooting, repair, adjustments and service techniques of the truck braking components. Prerequisite: none.

DVM 1114 4 0 15 9
Diesel Engines
This course provides the development of a general understanding of the basic principles involved in the construction, operation and maintenance of diesel engines. Upon completion of this course a student will demonstrate competency in the procedures of reconditioning, maintenance and servicing of selected diesel engines. Prerequisite: none.

DVM 1115 2 0 6 4
Drive Trains
This course provides the development of a general understanding of the basic principles involved in the construction, operation and maintenance of a truck drive train. Upon satisfactory completion of this course a student will demonstrate competency in the repair, operation and servicing of clutches, transmissions, drive lines and carrier assemblies. Prerequisite: none.

DVM 1116 2 0 6 4
Suspension and Steering
This course is a study of the function and design of the truck suspension and steering system components. Upon satisfactory completion of this course the student will demonstrate competency in the operation, repair, adjustment and servicing of the vehicle suspension, steering axle and steering mechanism. Prerequisite: none.

DVM 1117 2 0 6 4
Truck Charging and Starting Systems
This course will provide the development of an understanding of the principles, construction and operational features of the truck charging system components. The student will show competency in applying physics principles of electricity and magnetism to service and repair truck starter and charging systems. The student will also demonstrate

competency in the troubleshooting, repair and servicing of truck starting and charging system components. Prerequisite: none.

DVM 1118 1 0 6 3
Truck Electrical Systems
This course covers the basic theory and operation of the truck's electrical components and control circuits, excluding the generator and starter. Competency will be demonstrated in the application of physics principles of electricity and magnetism to troubleshoot, service and repair the components and controlling circuits. Attention will be focused on lights, switches, gages and electrical control circuits for various truck system components. Prerequisite: DVM 1112.

DVM 1119 2 0 6 4
Diesel Fuel Systems
This course covers the theory related to a study of the variations in design and the principles of operation of fuel injection systems used on the truck diesel engines. Competency will be demonstrated in the maintenance, repair, testing and adjustment of selected fuel pumps, injectors and system components. Prerequisite: none.

DVM 1120 2 0 6 4
Diesel Truck Maintenance
This course is designed for advanced students in the Diesel Vehicle Maintenance program. An overview and reinforcement of previous tasks will be presented. Student selection of jobs or tasks, with instructor's permission, will be encouraged. Emphasis will be stressed on time of task or job completion. Prerequisites: DVM 1113, DVM 1114, DVM 1115, DVM 1116, DVM 1119 or by permission of department chairperson.

DVM 1121 2 0 3 3
Truck Air Conditioning
This course provides the development of a general understanding of the basic principles involved in the construction and operation of a truck air conditioning system. The student will demonstrate competency in installation, service, troubleshooting and repair of the system components. Prerequisite: none.

ECO 102 3 0 0 3
Economics I
Economics I is a study of macroeconomics, which treats the economy as a whole. It is a study of Gross National Product, full employment, business fluctuations, economic growth, and the expansion of bank credit. Prerequisite: none.

ECO 104 3 0 0 3
Economics II
This course is a further study into the function of the United States economy as well as a look into world economics. Areas of study include prices, competition, nonprice competition, and income distribution in the United States. The course also includes a study of international trade and payments, economic development, and comparative economic systems. Prerequisite: ECO 102.

ECO 108 3 0 0 3
Consumer Economics
Consumer economics is designed to help students use their resources of time, energy, and money to get the most out of life. It gives the student an opportunity to build useful skills in buying, managing finances, increasing resources, and better understanding the economy. Prerequisite: none.

ECO 149 5 0 0 5
Macroeconomics
Macroeconomics is concerned with the economy as a whole or with large segments of it. This course is devoted to study of employment, changing levels of prices, the nation's total output of goods and services, the ways in which government raises and spends money, and an overview of international economics. Prerequisite: none.

ECO 150 5 0 0 5
Microeconomics
Microeconomics is concerned with the specific parts or economic units that make up an economic system and with the relationships between those parts. This course is devoted to the study of individual households, firms, and industries, and the ways in which such entities interact. Prerequisite: none.

EDP 100 3 2 0 4
Introduction to Data Processing
This course is an introductory course for students in the Business Computer Programming curriculum. It is a technical study of the history, terminology, equipment, and concepts of data processing. Laboratory exercises will be used to familiarize the student with data processing equipment and the microcomputer DOS/Windows environment. Prerequisite: none.

EDP 101 3 2 0 4
Principles of Business Data Processing
This is an introductory course designed to acquaint the student with the field of data processing. It includes a historical review

of data processing, basic terminology, and fundamental concepts of data processing and programming. Laboratory exercises are devoted to familiarizing the student with basic data processing concepts. Prerequisite: none.

EDP 102 3 0 0 3
Microcomputer Concepts
This course is designed to introduce the novice student to the fundamental concepts associated with microcomputing. Terminology, fundamental DOS operation, elementary programming concepts, and the microcomputing environment are taught. An introduction to applying microcomputers to various uses and an introduction to the literature are also provided. Prerequisite: none.

EDP 103 3 0 0 3
Introduction to Microcomputing DOS
This course is designed for the student without previous microcomputer experience. Operational concepts and DOS terminology and commands within a specific microcomputer system are studied. The primary focus and goal is student proficiency with DOS operations. Hands-on involvement constitutes a significant portion of the student's experience. Prerequisite: none.

EDP 104 3 0 0 3
Text Processing Applications I
This course is designed for the student without previous microcomputer experience. The major emphasis will be on fundamental word processing concepts and the skills to operate a specific word processing software package. Prerequisite: BUS 100 or BUS 102. Corequisite: EDP 102 or EDP 103.

EDP 105 5 2 0 6
Assembler Language Programming I
This course is an introduction to the study of assembly language programming for the IBM mainframe and making use of the microcomputer platform. It includes assembly language specifications, operations, and rules for writing source programs. The laboratory exercises are devoted to developing program logic and writing assembly language programs to solve sample problems. Prerequisites: EDP 100 and EDP 107. Corequisite: MAT 119.

EDP 106 3 2 0 4
Assembler Language Programming II
This is the second course in Assembly Language Programming. It covers the more complex features of the language such as macro instructions, register arithmetic, data validation, table handling, and subprograms. Laboratory assignments are devoted to developing logic, writing, and testing assembler language programs which make use of the concepts developed. Prerequisite: EDP 105.

EDP 107 3 0 0 3
Logic and Decision Making I
This course is an introduction to the concepts of providing logical solutions to the most common types of data processing programming problems. Concepts include simple input/output operations, mathematics, comparisons making use of the logical operators, and control break processing. Pseudocoding is used to provide the logic for program development using structured techniques. Prerequisite: none.

EDP 108 3 0 0 3
Logic and Decision Making II
This is the second course in concepts of providing logical development for computer programs. Advanced concepts covered in this course include multi-level control breaks, data validation, sequential file processing, and table processing techniques. Pseudocoding is used to provide the logic for program development using structured techniques. Prerequisites: EDP 100 and EDP 107.

EDP 109 3 0 0 3
Operating Systems I
This course is for students in the Microcomputer Systems Technology curriculum. Intensive examination of operational concepts, terminology and operating system commands is provided. Understanding and proficiency within an operating system are the primary goals. Prerequisite: none.

EDP 110 3 2 0 4
COBOL Programming I
This course is an introductory course in COBOL programming. It includes a study of the structure of the COBOL language, the most frequently used COBOL verbs, input/output techniques, computations, comparisons, and control break processing. Laboratory assignments stress development of structured program logic, writing, and testing COBOL programs which make use of the concepts developed. Prerequisites: EDP 100, EDP 108, and MAT 117.

EDP 111 3 2 0 4
COBOL Programming II
This course is a continuation of the study of COBOL Programming Language. It includes more complex COBOL instructions and concepts such as file handling techniques, data validation, table and array processing, and the internal sort feature. Laboratory exercises stress development of structured program logic, writing, and testing programs which make use of the concepts discussed. Prerequisite: EDP 110.

EDP 114 3 0 0 3
Text Processing Applications II
This course is a continuation of EDP 104 and is designed for the student who will utilize the word processing package in a professional or business setting. The course provides the student with knowledge of advanced word processing terms and concepts. Prerequisite: EDP 104.

EDP 120 3 2 0 4
Introduction to Computer Programming
This course is a nontechnical introduction to the COBOL programming language. Instruction includes how COBOL is used in business to automate business procedures. The laboratory exercises will be used to develop COBOL programs that can solve business problems. Prerequisite: EDP 101.

EDP 121 0 2 0 1
Fundamentals of Database Management
This course is designed for students who need a fundamental but functional overview of database management. This course will not fulfill any of the requirements for the Microcomputer Certificate. Prerequisite: none.

EDP 122 0 2 0 1
Fundamentals of WordPerfect
This course is designed for students who need a fundamental but functional overview of the WordPerfect word processing program. This course will not fulfill any of the requirements for the Microcomputer Certificate. Prerequisite: none.

EDP 123 0 2 0 1
Fundamentals of Personal Computers
This course is designed for students who need a fundamental but functional overview of the operation of IBM or compatible personal computers. This course will not fulfill any of the requirements for the Microcomputer Certificate. Prerequisite: none.

EDP 124 2 0 0 2
Computers in Information Access (CIA)
This is an introductory course focusing upon technology in information retrieval. Students will learn the fundamentals of using library CD-ROM databases, on-line services such as First Search, and information retrieval via the Internet. Library research trends and the impact of technology in the research process will be presented. Prerequisite: none.

EDP 125 3 0 0 3
Business Word Processing
This course is designed to provide business students with basic terminology, concepts, and operational skills needed to cope with virtually any word processing program within their working environment. Corequisite: BUS 100 or BUS 102, and EDP 103 or permission of instructor.

EDP 126 0 0 3 1
Microcomputer Practicum
This course is designed to give the student practical experiences in a variety of microcomputing applications. The student will work with a full-time instructor for 3 hours per week in a variety of situations. This course may be repeated for a maximum of 3 credit hours. Prerequisites: EDP 103 or permission of instructor.

EDP 140 3 2 0 4
BASIC Language Programming I
This is a course designed to acquaint the student with the BASIC programming language. The course assumes the student has no background in microcomputer operation. Laboratory exercises are used to provide experience in solving business data processing problems. Prerequisite: none.

EDP 141 3 2 0 4
BASIC Language Programming II
This course will involve writing BASIC programs using structured programming techniques, manipulation of sequential and random data files, sorting and searching of data, and arrays and the use of graphics in a business environment. Prerequisite: EDP 140.

EDP 142 3 0 0 3
Introduction to C Language
This is an introductory course in C Language. Laboratory exercises are used to provide experience in solving business data processing problems using C Language. C programs may be executed on a microcomputer running MS-DOS/PC-

DOS or the UNIX operating system. Prerequisite: EDP 151.

EDP 145 3 0 0 3
Introduction to the UNIX Operating System
This is an introductory course in using and understanding the UNIX operating system. Laboratory exercises are used to provide experience in solving data processing problems. Prerequisite: none.

EDP 150 3 0 0 3
Data Base Management Systems
This course is designed to provide an operational knowledge of fundamental concepts and terminology associated with data base management systems. Structural design, data input and retrieval, indexing, sorting, calculation, and report generation are studied within the environment of a specific data base management system. Prerequisite: EDP 109 or permission of instructor.

EDP 151 3 0 0 3
Operating Systems II
This course is designed to provide a more in-depth study of the operating system in association with program execution and interface. A focus on specialized topics as well as a comprehensive approach is taken. Student independence, problem solving, and research are primary focuses. Prerequisite: EDP 109 or permission of instructor.

EDP 152 3 0 0 3
Financial Spreadsheet Operations I
This course is designed to provide the student with knowledge of fundamental spreadsheet operations and the skills to operate a specific financial spreadsheet package. Template design and "what if" analysis are primary conceptual and operational focuses. Prerequisite: EDP 102 and EDP 109 or EDP 103 or permission of instructor.

EDP 154 3 0 0 3
Microcomputer Communications
This course is designed to familiarize the student with the capabilities and operations of various communications and/or networking systems. Types of hardware, systems, and transmission, as well as utilities and services are studied. Students should have a thorough knowledge of DOS upon entry to this course. Prerequisite: EDP 102 and EDP 103.

EDP 155 3 0 0 3
Tools for The Internet
This course will focus on computer mediated communication using the Internet. The emphasis of this course will be on the structure and operation of the Internet and the various tools needed to be productive network users. Prerequisite: EDP 103 or EDP 109 or permission of instructor.

EDP 156 3 0 0 3
Microcomputer Graphics
This course is designed to familiarize the student with the fundamental concepts and operation of a microcomputing graphics package. Representational concepts studied are animation, pie charts, bar graphs, line charts, and graphics report generation. Linkage within a presentation format is a primary focus. Prerequisite: EDP 103 or EDP 109 or permission of instructor.

EDP 158 3 0 0 3
Introduction to Assembler Language Program
This is an introductory course in Assembler Language on the microcomputer. The course of study focuses upon system architecture in relationship to software design. Lab exercises will be completed on a microcomputer executing MS/PC DOS. Students should have a thorough knowledge of standard C language or the BASIC language. Prerequisite: EDP 286 or EDP 141 or permission of instructor.

EDP 159 4 2 0 5
Introduction to Computer Information Systems
This course is a topical survey of computer information systems with emphasis upon an integrated overview of computing through its system components. Topics may include computers in business and the modern office, computer hardware and software, applications software, operating systems and shells, computer input/output, storage devices, structured programming, and the historical, current and future significance of computing in society. In order to prepare students with a basis for future educational and computing endeavors, competencies are stressed in such lab application areas as word processing, spreadsheet operations, and data base management systems. Individual lab work and a term paper are required. Prerequisite: none.

EDP 160 3 0 0 3
Special Topics in Microcomputing
This course is specifically conceived to meet industry and special group needs which are not addressed within the scope of the existing curriculum. This course may

only be used to fulfill elective curriculum requirements. Prerequisite: EDP 103.

EDP 162 3 0 0 3
Financial Spreadsheet Operations II
This course is designed to acquaint the student with intermediate concepts in the construction of spreadsheet templates and the presentation of financial information. Major topics to be covered will include data base operations, graphics presentation, financial analysis, and report generation. Prerequisite: EDP 152.

EDP 164 3 0 0 3
Networking Technologies
This course focuses on the basic concepts of data communications, networking and connectivity. Prerequisite: EDP 103 or EDP 109 or permission of instructor.

EDP 171 3 0 0 3
Alternative Operating Environment I
This course is designed for the student with a fundamental understanding of DOS who is interested in other operating environments. Comparable DOS commands will be taught in the system being studied along with a comprehensive study of other software provided with the system. Hands-on involvement constitutes a significant portion of the student's experience. Prerequisite: EDP 102 or permission of instructor.

EDP 172 3 0 0 3
Financial Spreadsheet Operations III
This course is designed as a study of advanced concepts in spreadsheet analysis and design. Major topics to be covered include data communications and translation, macro language concepts, and other programming considerations. Prerequisite: EDP 162.

EDP 173 3 0 0 3
Desktop Publishing Concepts I
This course is an introduction to the fundamental concepts and terminology associated with Desktop Publishing. Operational skills necessary for the design, layout, and printing of a publication are introduced within a conceptual as well as an experiential framework. Prerequisites: EDP 103, EDP 104, or EDP 125 or BUS 240.

EDP 174 3 0 0 3
Intermediate Desktop Publishing
This course focuses on building intermediate skills in desktop publishing. This course expands upon the basic concepts of publishing from the desktop by providing extensive practical application practice using a specified software package. Emphasis is placed on actual publication of multipage documents integrating numerous components of design. Students begin to manage the documents, select options, and make system configuration choices. Emphasis is also placed on learning traditional journalism and printing terminologies and applying them to an electronic desktop publishing environment. Prerequisite: EDP 173.

EDP 181 3 0 0 3
Alternative Operating Environment II
This course is designed for the student with a fundamental understanding of alternative operating environments who wishes to improve the performance of the operating environment and its applications. Hands-on involvement constitutes a significant portion of the student's experience. Prerequisites: EDP 171 or permission of instructor.

EDP 202 3 2 0 4
Minicomputer Operating Systems
This course is designed to acquaint the computer programming student with the operating system of a general purpose business minicomputer. Topics covered will include objects, logical and physical files, libraries, creating and administering user profiles, journaling, save/restore functions, database query, and command language programming. Prerequisites: EDP 100 and EDP 108.

EDP 205 3 2 0 4
Systems Analysis and Design
This course is designed to give the student training in currently used techniques of systems analysis and design. Instruction in the classroom and the laboratory exercises will concentrate on the phases of the system development life cycle which include preliminary and formal investigation, problem definitions, problem determination, file organization, effective techniques for retrieval and manipulation of data, systems design techniques, implementation and evaluation methodologies, and systems documentation. Prerequisite: EDP 111.

EDP 208 3 2 0 4
Advanced Programming
This course is designed to acquaint students with complex programming activities and refined programming techniques. Specific concepts include software engineering using CASE Tools, object-oriented pro-

gramming techniques, graphical user interface development, and fourth generation programming languages. Prerequisites: EDP 111, EDP 210, and EDP 205.

EDP 210 3 2 0 4
Mainframe Computer Operating Systems
This is a study of computer systems involving such topics as job scheduling, file devices, file organization, operating systems, job control language, and multi-programming. Prerequisites: EDP 110 and MAT 117.

EDP 220 3 2 0 4
Research Project
This course is designed to give the student an opportunity to initiate and carry out a carefully selected project. The student is given the responsibility to solve a significant problem with a minimum of assistance from the instructor. Prerequisite: EDP 205.

EDP 242 3 2 0 4
C Programming Language
This course is designed to acquaint the Business Computer Programming student with the C Programming Language. The fundamentals of the language, arrays, pointers, data structures, and file handling are included. An introduction to the C++ Programming Language is also included. Prerequisites: EDP 100, EDP 108, MAT 117 and EDP 105.

EDP 245 3 2 0 4
UNIX Operating System
This is a general course in using the UNIX operating system. Laboratory exercises are used to provide experience in solving data processing problems using UNIX. Prerequisites: EDP 100 and EDP 108.

EDP 250 3 0 0 3
Programming I
This course is an introductory course in programming. It is designed to provide an operational knowledge of fundamental programming concepts and terminology associated with software design. Student independence is a primary focus. Prerequisite: EDP 281 or permission of instructor.

EDP 256 3 0 0 3
Microcomputer Graphics II
This course is a continuation of EDP 156. It is designed to familiarize the student with the advanced concepts and operation of computer-aided drawing, picture library access, animation, and graphics report generation. Prerequisite: EDP 156.

EDP 260 3 2 0 4
EDP Microcomputing
This course offers a very intense study of the most advanced concepts in microcomputing. Research, experimentation, and lab assignments are included in the development of concepts. Prerequisites: EDP 140 and EDP 108.

EDP 262 3 0 0 3
Programming II
This course is a continuation of EDP 250. The focuses and objectives of this course are student independence in software applications development and the study of techniques associated with source code development. Primary emphasis is placed upon student independence. A lab and project approach is taken. Incorporation of design concepts are utilized via a project approach. Prerequisite: EDP 250.

EDP 264 3 0 0 3
Network Administration
This course is designed to provide students with the necessary knowledge and skills to perform competently in the role of network administrator or system manager. Students completing this course will be able to accomplish basic and fundamental network management tasks. Prerequisite: EDP 164 or permission of the instructor.

EDP 270 3 2 0 4
RPG III Programming I
This is an introductory course in RPG III programming. Laboratory exercises are used to provide experience in producing reports and processing files using RPG III. Prerequisites: EDP 100 and EDP 108.

EDP 271 3 2 0 4
RPG III Programming II
This course is a continuation of the study of the RPG III Programming Language. Laboratory exercises will involve arrays, data validation, disk files, database structure, and interactive processing. Prerequisite: EDP 270.

EDP 275 3 0 0 3
Hardware/Software Support
The intent of this course is to present the principles and techniques of microcomputer hardware interface, software installation, troubleshooting, and data exchange among software programs. Prerequisite: EDP 151 or permission of the instructor.

EDP 280 3 0 0 3
Expert/Intelligent Systems
This course introduces AI concepts and techniques. It involves the study of the internal and external design features of an expert system as related to artificial intelligence concepts. Study of a specific system in relation to design concepts is the primary focus. Prerequisite: EDP 250.

EDP 281 3 0 0 3
Operating Systems III
This course is designed for the student with previous or current microcomputer experience. Operational concepts, and operating systems terminology and commands within one or more microcomputer operating systems are studied. The primary focuses are student proficiency with operations and understanding of systems concepts. Hands-on involvement constitutes a significant portion of the student's experience outside of class as lab assignments. Prerequisites: EDP 151.

EDP 282 3 0 0 3
Microcomputer Business Applications
This course is designed to give the student experiences using a variety of business-related software on the microcomputer. The course will introduce a variety of software packages and give the student the opportunity to explore how productivity can be increased using the microcomputer and software. Prerequisites: EDP 103 and MAT 119.

EDP 283 3 0 0 3
Multimedia/Presentation Graphics
This course will enable students to explore new horizons of communication by integrating text and graphics with animation, sound, and video. Prerequisites: BUS 100, EDP 103, and EDP 104.

EDP 284 3 0 0 3
Service and Support
This course focuses on installing, maintaining and troubleshooting networks. Class discussion topics include network adapter configurations, network cabling, disk expansion, troubleshooting techniques and common network problems. Prerequisite: EDP 264 or permission of instructor.

EDP 285 3 0 0 3
C Language I
This is an introductory course in Borland C Language programming. Programming topics include an overview of the language, programming mechanics, data types, control statements, and input/output. This course is designed for individuals with prior experience in another language. Prerequisite: EDP 103 or permission of instructor.

EDP 286 3 0 0 3
C Language II
This course completes the introduction to traditional C Language programming with coverage of arrays, pointers, structures, and file input/output. An important objective is the development of student independence in programming and software design. Prerequisite: EDP 285 or permission of instructor.

EDP 287 3 0 0 3
Tools Assisted Programming
This is a course in using current programming tools to assist in coding and software development. Visual tools, debuggers, and code viewers used for generating event driven code, procedural code, and error detection and correction are potential areas of study. Thorough knowledge of one language is required before taking this course. This is a course for computer professionals and student independence is necessary. Prerequisite: permission of instructor.

EDP 288 3 0 0 3
Advanced Network Administration
This course provides Network Administration with information that enhances their network managing and monitoring skill, and includes topics related to server and client management and performance. Participants work with these concepts through lectures, demonstrations, discussions, and many hands-on activities. Prerequisite: EDP 264 or permission of instructor.

EDP 289 1 4 0 3
Microcomputer Project
This course is designed to demonstrate the skills and competencies developed in practical personal computer applications. The student will be required to analyze, develop, and complete an assigned project with minimal supervision from the instructor. Prerequisites: EDP 114, EDP 162 and EDP 250.

EDP 1101 3 0 0 3
Desktop Publishing for Graphic Arts
This course focuses on introducing the concept of publishing from the desktop using PageMaker publishing software package. Emphasis is placed on the planning, design, layout, editing, and printing of a publication. Text and graphics are imported into the package. Hands-on involvement constitutes

a significant portion of the student's experience. Introduction to DOS fundamentals will also be included. Prerequisite: none.

EDU 101 6 0 0 6
Child Growth and Development
This course is the study of the mental and physical growth of the child from birth through adolescence. Through a brief review of recent studies in child development, the student will gain knowledge of frequently used educational research methods and research terminology. Prerequisite: none.

EDU 102 3 2 0 4
Programs for Young Children
This is a comparative study of traditional, current, and innovative preschool programs. The laboratory experience provides opportunities for the students to observe and record the growth and behavior of young children. Prerequisite: EDU 101.

EDU 103 3 0 10 4
Working with Young Children
Case presentations, film observations, and group discussions are utilized to study characteristic behaviors of each level of development and to derive guidelines for promoting desirable behaviors and for coping with undesirable behaviors. Laboratory experiences will provide opportunities to develop observation skills, effective techniques, and beginning skill in adapting activities to the needs of individual children. Prerequisite: EDU 102.

EDU 104 3 0 0 3
Art for Young Children
This course is a study of the art of young children and the development of techniques of working with young children to encourage creative expression through a variety of media. Prerequisite: EDU 103 or permission of the department chairperson.

EDU 105 3 0 0 3
Music and Creative Movement for Young Children
This course is an exploration of a wide variety of musical activities for young children with special emphasis on techniques of selecting activities appropriate to the age level and the individual needs of the children. Prerequisite: EDU 103 or permission of department chairperson.

EDU 106 5 0 10 6
Activities for Young Children: Science and Math
This is individual and group exploration of activities and materials for developing mathematics and science experiences for preschool children, which would permit the children to learn through manipulation, experimentation, and discovery. The laboratory experience provides opportunities to implement activities with children. Prerequisite: EDU 112.

EDU 107 2 2 0 3
Communicating with Young Children
This is a course designed to improve the verbal and nonverbal communication of students working with small children in the child care center. Special emphasis is on developing awareness of body language communication, listening skills and modeling of the English language for young children. Aids to the reading and telling of literature will also be taught. Each student will be given laboratory assignments for communication experiences with small children. Prerequisites: ENG 100 and EDU 101.

EDU 108 3 0 0 3
Social Studies in Early Childhood
This is a study of the social studies phenomena that are of interest to young children. Classroom experiences will be designed to teach the student to use social studies as an integral component of the overall program for young children. Prerequisite: none.

EDU 109 1 2 0 2
Physical Activities: Games for Young Children
This is an exploration of activities for promoting optimal overall physical development of young children, with special emphasis on body movements (exercise, dance, and games). The lab time is devoted to implementing games with children. Prerequisite: none.

EDU 110 2 0 3 3
Instructional Media and Resources
This course is a survey of media and appropriate learning materials for young children. It includes a study of the role of instructional media and resources in teaching and learning, and sources of free, inexpensive material. Directed practicum time is used to construct and prepare appropriate teaching aids to use with children to help conceptual development. Prerequisites: EDU 101, EDU 102, and EDU 103.

EDU 111 3 0 0 3
Infant/Toddler Development and Activities
This course emphasizes the skills needed to effectively implement group care for infant/toddlers. Topics include principles of child development, and developmentally appropriate practices. Prerequisite: EDU 101 or consent of advisor.

EDU 112 3 0 0 3
Language Arts in Early Childhood
This course is a comprehensive study of each facet of language arts with emphasis on techniques of designing activities and selecting materials to promote optimal overall development and to meet the specific needs of individual children. Prerequisite: none.

EDU 115 3 0 0 3
Child Care Credential I
This course provides the first half of instruction necessary to qualify for the N.C. Child Care Credential. This credential prepares an individual for entry-level employment as a teacher in a child care setting. Areas of study include introduction to the child care profession, child growth and development, and getting to know the whole child. Prerequisite: none.

EDU 116 3 0 0 3
Child Care Credential II
This course provides the final half of instruction necessary to qualify for the N.C. Child Care Credential. This credential prepares an individual for entry-level employment as a teacher in a child care setting. Areas of study include developmentally appropriate practices, positive guidance, and providing a safe and healthy environment. Prerequisite: EDU 115.

EDU 117 3 0 0 3
Family Child Care Credential II
The focus of this course is on the special business and professional aspects of owning and operating a family child care home. This unit will address registration and accreditation, budgeting, enrollment of families and maintenance of professional relationships with parents, record keeping, and professional growth and development for family child care providers. At the end of this unit, providers will also have completed their parent handbook, which will contain policies on developmentally appropriate practice; positive guidance; health, safety, and nutrition; and business practices. Prerequisite: EDU 115.

EDU 202 4 0 10 5
Curriculum Development and Planning
This course provides experience in a variety of child care settings to develop further skill in working with young children, in assisting with programming activities, and in adapting to the needs of individual children. Analysis of individual problems encountered in working with specific age groups will be studied. Prerequisite: EDU 106.

EDU 203 3 0 0 3
The Exceptional Child
This is a study of children with development variations requiring modification in activities. Consideration is given to recognition of problems, community resources, and appropriate activities for the child with exceptional deviations in personality or physical development. Prerequisites: PSY 102, PSY 205, and EDU 106.

EDU 204 3 0 0 3
Parent Education
This is a study of ways parents can be involved in the child development center, of the purpose and value of home visitation, and of techniques for reporting child progress to parents. The role of the early childhood specialist in aiding parents in guidance of the child's development is emphasized. Each student will develop a series of programs appropriate for presentation to the parents of preschool children. Prerequisite: EDU 103.

EDU 211 4 0 20 6
Early Childhood Internship
This is a study to give the student practice in the care of the young child. This course will give the student more experiences in directing preschool activities. Students spend a major time block caring for and guiding young children. Opportunities to carry out planned units of study will be allowed the student in this quarter. Prerequisites: successful completion of all practicums and permission of department chairperson.

EDU 230 1 0 0 1
Issues in Early Childhood: Discipline
This course focuses on basic concepts of discipline as an educational tool for the normal child. It emphasizes the student's development of an attitude of positive interaction with children and one another in an effort to foster the growth of affirmative behaviors in young children. Prerequisite: none.

EDU 233 1 0 0 1
Issues in Early Childhood: Infant Feeding
This course focuses on how care givers must understand and provide for proper feeding of infants. Emphasis is placed on the nutrition essential for good development. Prerequisite: none.

EDU 234 1 0 0 1
Issues in Early Childhood: Child Abuse and Neglect
Because child abuse and neglect often reflect changes and stresses in society, this course has been designed to increase one's awareness of this form of violence and to teach the students how they can create a more nurturing, less stressful, nonviolent environment for our children. Prerequisite: none.

EDU 235 1 0 0 1
Issues in Early Childhood: School- Age Child Care
This course focuses on unique characteristics and needs of the school-age child. Emphasis is on planning developmentally appropriate enrichment activities. Prerequisite: none.

EDU 271 3 0 0 3
Child Care Administration
This course will focus on laws and regulations, policies, procedures, and other administrative responsibilities of operating a child care facility. Prerequisites: successful completion of practicums or permission of department chairperson.

ELC 101 5 0 6 7
Fundamentals of Electricity I
This course is an introduction to the basic principles of electricity and electric circuits. The definitions of fundamental electrical units will be covered, and DC responses of various series and parallel resistive networks will be studied. Prerequisite: none.

ELC 102 5 0 6 7
Fundamentals of Electricity II
Series and parallel resonant-circuits analysis, resonant and nonresonant transformer analysis, basic diode power supply analysis, introduction to nonlinear resistive control devices, and introduction to electromechanical devices are studied. Prerequisites: ELC 101 and MAT 101.

ELC 1111 3 0 0 3
Applied Electricity
The fundamental concepts of alternating current, including a study of capacitive and inductive effects and resulting phase angle, are covered. A study of power, current, voltage, and impedance in the AC circuit as applied to AC power machinery and control devices relating to heating and refrigeration systems are also included in the course. Prerequisite: none.

ELC 1120 7 0 15 12
Direct and Alternating Current
The course includes a study of the structure of matter and the electron theory; the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits; analysis of direct current circuits by Ohm's Law and Kirchhoff's Law; sources of direct current potentials; fundamental concepts of alternating current flow; a study of reactance, impedance, phase angle, power, and resonance; and alternating current circuit analysis. Prerequisite: none.

ELC 1121 7 0 15 12
Electrical Installation Fundamentals
This is an introduction to the field of electrical installation. Instruction will include a course overview, use of hand tools, wiring layouts, practice wiring, safety, and the National Electrical Code. Prerequisite: none.

ELC 1122 7 0 15 12
Residential Wiring I
The techniques learned in ELC 1121, Electrical Installation Fundamentals, will be applied to actual wiring. Other subjects covered will include material take-off, power tools, and electrical calculations. The study of the electrical code will be continued. Prerequisite: ELC 1121.

ELC 1123 6 0 15 11
Residential Wiring II
This is a continuation of ELC 1122, Residential Wiring I. Practice wiring will be continued. Other subjects covered will include interpretation of specifications, electrical contracts, switch gear, and electrical design. The study of the electrical code will be continued. Prerequisite: ELC 1122.

ELC 1125 6 0 15 11
Commercial and Industrial Wiring
This course covers layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Codes, and the application of the fundamentals to practical experience in wiring, conduit preparation,

and installation of simple systems. Prerequisite: ELC 1123.

ELM 200 3 0 3 4
Mechanisms
This course is an introduction to the various simple mechanisms which are used to build up industrial machinery. Kinematic aspects as well as physical applications will be studied. Prerequisite: PHY 111.

ELM 210 4 0 6 6
Electromechanical Devices
This course covers a wide range of electromechanical devices found in industrial equipment. The theory of operation of each will be studied and an opportunity will be provided in the lab to become familiar with their operating characteristics and limitations. The common causes of trouble will also be studied. Prerequisites: ELM 200, ELN 210.

ELM 215 5 0 6 7
Electrical Control Systems
This course is an introduction to the study of the control of electrical equipment. It covers the various elements used in control systems and their use to control the electromechanical equipment which powers much of today's industrial machinery. Various power distribution systems will be discussed and the use of programmable controllers will be introduced. The laboratory will give an opportunity to implement some of these systems. Prerequisites: ELM 200, ELN 210. Corequisite: ELM 210.

ELM 220 4 0 3 5
Automatic Control Systems I
This course continues in the study of more advanced programmable controller applications. Emphasis will be on the use of the personal computer in the development, transferring, and testing of programs. The combination of programmable controllers with computer graphics data gathering and control programs will be covered. A study of robotics applications will be introduced, with significant hands-on laboratory experience. Prerequisites: ELM 210 and ELM 215. Corequisite: ELN 219.

ELM 225 2 4 0 4
Programmable Controls
This course is an introduction to the use of programmable controllers in industrial applications which currently employ conventional relay logic. Although a reasonable knowledge of these relay control systems is assumed, a thorough review will be provided. Sufficient laboratory time will be allowed to ensure that the student attains a hands-on working knowledge of programmable controllers. Prerequisite: ELN 236 or equivalent experience.

ELM 230 5 0 3 6
Automatic Control Systems II
This course is a continuation of Automatic Control Systems I. More advanced automatic control systems and typical industrial process control systems will be studied. Measurement theory and PID loops will be covered, and an opportunity will be provided to investigate them in the lab. An overview of process control computers and computer integrated manufacturing will be given. Prerequisites: ELM 220 and ELN 219. Corequisites: ELM 240 and ELN 225.

ELM 240 3 0 3 4
Electromechanical Troubleshooting
This course will instruct students in the development of a coherent strategy for solving maintenance problems with the electromechanical equipment they are likely to encounter in industry. In order to give hands-on experience in the lab, several systems will be provided in which known problems can be inserted. Emphasis will be placed on equipment controlled by programmable controllers, and typical industrial systems such as motor speed controls and some process control instrumentation. Procedures will be stressed rather than specific equipment. Corequisites: ELM 230 and ELN 225.

ELN 110 5 2 6 8
Transistor Applications
This course is devoted to transistor operations as a discrete control device. The content includes biasing and dynamic analysis of the common-emitter, common-collector, and common-basic configurations as they apply to amplifiers and oscillators. Some general consideration is given to the field effect transistor. Prerequisites: ELC 102 and MAT 102.

ELN 210 5 2 6 8
Linear Integrated Circuits
This course is an extensive study of linear integrated circuits such as differential amplifiers, operational amplifiers, regulators, timers, and phase lock loops. Emphasis is placed on OP amp applications as they apply to waveshaping, amplifiers, oscillators, and filters. Prerequisite: ELN 110.

ELN 219 5 0 6 7
Digital Fundamentals
This course is an introduction to the logic and digital circuits typically used in indus-

trial control circuits, microprocessors and computer systems. Prerequisites: ELN 110 and ELN 210.

ELN 225 4 0 6 6
Computers and Microprocessors
This course is an introduction to a typical industrial microprocessor. The theory of operation, architecture, memory, input/output, bus structure, timing and instruction set will be covered. Standard industrial test equipment will be used as an analysis and troubleshooting aid. Prerequisite: ELN 219.

ELN 235 5 0 6 7
Industrial Electronics I
This course is a study of a wide variety of transducers, such as pressure, temperature, light, and velocity as they apply to industrial control devices. Prerequisite: ELN 210.

ELN 236 4 0 6 6
Industrial Electronics II
This course is a study of electromechanical devices, including electric motors and generators, motor starters, and contractors. Also, servo systems and three-phase power distribution are covered. Prerequisite: ELN 235.

ELN 247 4 0 6 6
Electronic Systems: Computers
This course consists of a functional block diagram analysis of a microcomputer system currently used in industry. Classroom activity includes flow charting and the use of the instruction set in writing programs in machine language. The lab will provide practice in manipulating the hardware and software associated with such computers. Prerequisite: ELN 219.

ELN 248 5 0 6 7
Microprocessor Interfacing
This course is an introduction to microprocessor interfacing. The course is designed to familiarize the student with interface circuits commonly used with microprocessors. A short introduction to job hunting is included. Prerequisites: ELN 110, ELN 210, ELN 219, ELN 235, ELN 236 and ELN 247.

ELN 250 4 0 6 6
Networking Personal Computers
This course is an introduction to the Basics of Local Area Networks (LANs). Major topics include structure of the personal computer, wiring and cabling considerations for the LANs, network interface cards, and software installation on the file server and workstations. Prerequisite: ELN 247.

ELN 1110 1 0 3 2
Basic Electronics
This course is a general introduction to electronic systems as currently found on gasoline and diesel vehicles. Students will review AC-DC electrical and magnetic theory. The student will be introduced to solid state devices, transducers and microprocessors as they apply in a controlled environment and to the electronic equipment used in troubleshooting and testing of solid state devices. Prerequisite: DVM 1112.

ELN 1118 3 0 3 4
Industrial Electronics
This is a general introduction to the field of electronics with special emphasis on industrial applications. This course is designed to help the nonelectronic vocational student understand the basic principles of electronics as applied in a modern industrial setting. After a review of DC and AC theory, the student will see digital electronics applied in the control of motors. In addition, the student will receive a brief introduction to process control and various transducers. Prerequisite: PHY 1103

ELN 1121 5 0 9 8
Solid State Devices and Circuits
This is a course in solid state theory and the servicing of AM and FM radio and stereo receivers. Devices to be studied include the diode, transistor, FET, Zener diode, and the VCO as circuit components. The circuits studied are multiplexing and decoders. An introduction to troubleshooting of AM, FM, and FM stereo receivers is included. Prerequisite: ELC 1120.

ELN 1122 4 0 9 7
Transistor Theory and Circuits
This is a course in semiconductor theory. Devices to be studied include the diode, transistor, FET, Zener diode, SCR, UJT, and integrated circuits. Circuits studied in lecture and laboratory sessions include power supplies, tuned amplifiers, audio amplifiers, oscillators, and detectors. An introduction to systems troubleshooting is included. Prerequisite: ELC 1120.

ELN 1123 7 0 18 13
Black and White Television Servicing
The course covers a study of black and white television receivers, a detailed study of all circuits of the TV receiver in classroom and laboratory sessions, and super-

vised servicing practice to develop skills in using test equipment to repair and maintain television receivers. Prerequisites: ELN 1121 and ELN 1122.

ELN 1124 6 0 21 13
Color Television Servicing
The course includes theory of operation of the television circuits peculiar to color receivers, composite color telecasting signals, color receiver detectors, kinescopes, convergence, and matrix networks. The theory of operations and practical test bench techniques, including troubleshooting, alignment, and convergence, are covered. Prerequisite: ELN 1123.

ENG 001 3 0 0 0
Spelling
This course in basic spelling emphasizes the relationship of symbols to their corresponding sounds. It stresses spelling rules, mnemonics, and techniques in the perceiving of sounds and retaining the memory for words as a configuration. Proofreading and dictionary use are also emphasized. Prerequisite: none.

ENG 005 2 2 0 0
Language Development I
This is the first in a series of courses which concentrate on basic reading skills that enable a student to analyze words through phonetic word attack. Prerequisite: recommendation by the department chairperson.

ENG 006 2 2 0 0
Language Development II
This is a continuation and specialization in language skills. Prerequisite: recommendation by the department chairperson.

ENG 007 2 2 0 0
Language Development III
This is a continuation and specialization in language skills. Prerequisite: recommendation by the department chairperson.

ENG 008 2 2 0 0
Language Development IV
This is a continuation and specialization in language skills. Prerequisite: recommendation by the department chairperson.

ENG 010 5 0 0 0
Basic Writing Skills
Designed to strengthen the spelling and grammar skills of the student who is not ready to complete ENG 012 successfully, this course enables the student to develop competency in spelling, proofreading, punctuation, and writing sentences. Prerequisites: placement determined by a diagnostic test. Corequisite: ENG 021.

ENG 012 5 0 0 0
Basic Writing Skills II
English 012 is designed to strengthen the writing skills of the student who is not ready to complete ENG111, ENG 101, or ENG 150 successfully. This course enables the student to develop competency in punctuation, grammar, sentence structure, flow of ideas, and paragraph writing.Prerequisites: ENG 021 and ENG 010, if diagnostic tests indicate a need for these courses.

ENG 017 5 0 0 0
Principles of the Alphabetic System I
This is the first of three reading courses designed to teach the phonemic structure of the English language. Prerequisite: recommendation by the department chairperson.

ENG 018 5 0 0 0
Principles of the Alphabetic System II
This course is a continuation of the process of teaching reading through the phonemic structure of the English language. Prerequisite: ENG 017.

ENG 019 5 0 0 0
The Phonetic Approach to Language Structure
This course helps students build a solid foundation of basic word and reading skills using the phonemic process. Study of word parts, dictionary use, and literal comprehension is also incorporated. Prerequisite: recommendation by the department chairperson or as determined by departmental test battery.

ENG 021 3 0 0 0
Basic Reading Skills and Vocabulary I
This basic reading course is structured to enable students who are experiencing decoding difficulties to improve their word attack skills. Dictionary usage, comprehension, and vocabulary development are also included. Prerequisite: demonstration of minimum proficiency in word attack skills as determined by departmental test battery.

ENG 022 3 0 0 3
Basic Reading Skills and Vocabulary II
This course is designed to enable students to develop the ability to analyze words and to increase their vocabulary. Major emphasis is placed on developing comprehension

skills. Prerequisite: demonstration of a minimum proficiency in comprehension and word attack skills as determined by the departmental test battery or completion of ENG 021.

ENG 023 3 0 0 0
Basic Reading Skills III
This course is an advanced reading course that stresses speed and accuracy in reading comprehension with emphasis on attaining satisfactory performance levels on standardized tests. Additional topics studied include test-taking techniques, vocabulary building and reading in the content areas. Prerequisite: demonstration of an 11+ grade reading level based on a departmental standardized test or successful completion of ENG 022.

ENG 050 5 0 0 0
English for International Students
An introductory-level course designed to prepare ESL (English-as-a-Second Language) students for more capable performance in curriculum coursework. Emphasis is placed on the following skills: pronunciation, vocabulary, spelling, word order and sentence patterns, and fluent expression. Prerequisites: a demonstrated fourth grade reading level, based on a departmental standardized test (TABE M) and referral by the department chairperson.

ENG 100 3 0 0 3
Oral Communication
This course provides students the opportunity to improve their skills for public speaking, interpersonal communication, and group participation. Included are formal and informal speeches, class exercises, and conferences. Prerequisite: none.

ENG 101 3 0 0 3
Introduction to Written Communication
This course begins a study of the writing process with emphasis on developing short essays. Exercises in style and mechanics as needed. Prerequisite: passing score on screening tests or English 010 and/or English 111.

ENG 102 3 0 0 3
Composition
This course continues a study of the writing process with emphasis on the basic logical modes and critical analysis to develop research papers. Exercises in style and mechanics as needed. Prerequisite: ENG 101 or equivalent transfer credit.

ENG 103 3 0 0 3
Technical Report Writing
This course concerns a study of the writing process with emphasis on technical reports using topics related to the student's major curriculum. Unit on employment letters is included. Prerequisites: ENG 102 and enrolled in third quarter of curriculum (minimum) or by permission of department chairperson.

ENG 111 3 0 0 3
Grammar Skills
English 111 is designed to bridge the gap between English 010, Basic Writing Skills, and English 101, Introduction to Written Communication. Its main purpose is to prepare students for the editing and proofreading requirements in English 101 and the upper-level writing courses. Basic grammar, punctuation, and mechanics review are the major units of study. Although drill and practice are the main teaching techniques, writing assignments will be used to make sure students can identify and punctuate major structures of the language. By the end of the course, students should be able to edit prose (their own and others') according to the standards of current English usage. Prerequisite: none.

ENG 115 3 0 0 3
Appreciation of Literature
Students will read and analyze works from various periods and cultures in the major prose and poetry genres. Through group discussions and individual papers they will relate literature to other fields of study (e.g. history and psychology) so that they will better understand how literature reflects life and culture. Prerequisite: ENG 101.

ENG 116 3 0 0 3
Children's Literature
This is a survey of literature for young children. The student will gain an appreciation and awareness of a variety of types of literature to be presented to the child during the preschool years. Prerequisite: EDU 107 and EDU 112.

ENG 118 1 0 0 1
Feature Writing
This course provides for identification, research, and application of writing techniques with emphasis on newsprint. It includes analysis of readers and reader appeal. The students in this class contribute to the quarterly production of the student newsletter, *Technically Speaking*. Prerequisite: permission of the instructor.

ENG 119 1 0 0 1
Graphics and Layout of Print
This course examines the physical appearance of the newsletter with emphasis on print size and placement of headlines, visuals and announcements. The students contribute to the production of the newsletter, *Technically Speaking*. Prerequisite: permission of the instructor.

ENG 120 1 0 0 1
Interviewing and Reporting
The course examines the correct procedure for interviewing and reporting the news. The students will produce a quarterly newsletter, *Technically Speaking*. Prerequisite: permission of the instructor.

ENG 121 1 0 0 1
Newsletter Editing
This course examines the application of newsletter journalism in relation to copy proofreading, formulation of headlines and newsletter organization. Students in this class must contribute to the production of the quarterly newsletter, *Technically Speaking*. Prerequisite: permission of the instructor.

ENG 122 1 0 0 1
Modern Lay-Out Techniques
Through lectures, demonstrations and hands-on experience, the student will learn to use the Apple Macintosh Plus computer for desktop publishing. Opportunities will also be offered to use the IBM computer for graphics. Prerequisite: none.

ENG 123 0 2 0 1
Lay-Out Practices
Students will begin lay-out of the college magazine, *Collage*. Corequisite: ENG 122.

ENG 124 1 0 0 1
The Popular, Literary, and Art Magazine
By using a broad survey of a variety of magazines published by institutions, the student will formulate a concept of the content and layout of such a magazine. Prerequisite: ENG 102 or permission of the instructor.

ENG 125 0 2 0 1
Magazine Practices
Students will produce the college magazine, *Collage*. Corequisite: ENG 124.

ENG 150 5 0 0 5
Freshman Composition I
This course begins a study of the writing process with emphasis on short themes and research papers. Students will develop skills in prewriting, writing, and reviewing while completing written and oral assignments based on various kinds of prose. They will also learn how to use these skills for writing in other disciplines. Prerequisite: satisfactory score on placement test or permission of department chairperson.

ENG 151 5 0 0 5
Freshman Composition II
This course is a continuation of the applications and principles in ENG 150, with emphasis on analyzing and critiquing selected literary works. Prerequisite: ENG 150.

ENG 201 5 0 0 5
English Literature I
This course presents a study of selected British writers from the Anglo-Saxon period through the Restoration, with emphasis on various genres as background for the writing of student themes. Prerequisite: ENG 151.

ENG 202 5 0 0 5
English Literature II
This course presents a study of selected British writers from the Romantic Age to the present, with emphasis on various genres as background for the writing of student themes. Prerequisite: ENG 151.

ENG 205 3 0 0 3
Report Writing
This course is a study of the writing process with emphasis on business reports. Both formal and informal reports are developed. Prerequisite: ENG 102 or permission of the department chairperson.

ENG 206 3 0 0 3
Communications
This is a study of the writing process with emphasis on business letters and memos. An employment unit is included. Prerequisite: ENG 151, ENG 102 or permission of department chairperson.

ENG 207 3 0 0 3
Educational Report Writing
This is a written communication course stressing business letters, memos, reports, and employment interviewing. Special emphasis will be on types of communication written in child care centers, anecdotal records, school newsletters, progress letters and reports, request letters for conferences,

accident reports, press releases, etc. In conjunction with the summer quarter courses (EDU 112 and EDU 110), each student will prepare a report on teacher-made materials as a project for both the English and education courses. Prerequisites: EDU 101, EDU 102, EDU 103, and ENG 102.

ENG 210 5 0 0 5
American Literature I
This course presents a survey of major American literature from its beginning through the 19th century, with emphasis on various genres as background for the writing of student themes. Prerequisite: ENG 151.

ENG 211 5 0 0 5
American Literature II
This course presents a survey of 20th century American literature with emphasis on various genres as background for the writing of student themes. Prerequisite: ENG 151.

ENG 220 5 0 0 5
Survey of African-American Literature
This course will explore the vast and rich body of literature by African-American writers, beginning with Lucy Terry's "Bars Fight" in 1746 and arriving at the present with such contemporary authors as James Alan McPherson, Alice Walker, August Wilson, Rita Dove, and Terry McMillan. Students will read, analyze and grow to appreciate African-American literature through a sampling of the genres. In addition to traditional literacy approaches, the works will be considered within their historical and sociological contexts. Prerequisites: ENG 151 or ENG 102.

ENG 230 5 0 0 5
Creative Writing-Short Fiction
This is an exploration of fiction writing with an emphasis on developing specific skills for writing the short story. Prerequisites: ENG 150 and 151 or ENG 101 and 102.

ENG 250 5 0 0 5
Patterns in World Literature
This introductory course considers the recurring themes, motifs, and patterns of classical and folk literature, relating these to current expression. Students will explore both in and out of class, collectively and individually, the patterns that have concerned mankind throughout time. Development of oral and written presentations will be stressed. Prerequisite: ENG 151 or permission of instructor.

ENG 1101 3 0 0 3
Communications I
This is a course in communication skills stressing reading, writing, speaking, and listening. The course includes library research, planning and delivering effective oral presentations, participation in group discussions, and practice in developing listening skills. Prerequisite: none.

ENG 1112 3 0 0 3
Communications II
This is a ccourse in communication skills with emphasis on written communication in business and industry. Included are units on business letters, job employment, records, forms and reports. Prerequisite: none.

FSE 101F 3 0 0 3
Introduction to Funeral Service
This course includes the principles of funeral service and its history. Emphasis is placed on the ethical obligations and fundamental requirements involving skill, aptitude, and qualifications of funeral directors. Upon completion, students will be able to recognize historical names, places, and events from the past which directly affect the future of funeral service. Prerequisite: none.

FSE 115F 3 0 0 3
Funeral Service Law
This course provides the student with insight into the fundamentals of mortuary law. Emphasis is placed on North Carolina Mortuary Law, OSHA, anatomical donations, vital statistics, and general law relative to mortuary law. Upon completion, students will be able to complete death certificates, notification of death forms, medical examiner forms, and other required forms. Prerequisite: none.

FSE 121F 3 0 0 3
Funeral Service Practices
This course helps develop a knowledge of funeral service procedure of various religions and provides a study of the customs and funeral practices in the U.S. Topics include the study of liturgical and nonliturgical Protestant, Catholic, Jewish, and many other religious groups. Upon completion, students will be able to discuss the different religious and fraternal groups and know how their services are conducted. Prerequisite: none.

FSE 224F 4 0 0 4
Funeral Home Operations
This course will outline all phases of funeral home operations, and students will develop a basic approach to successful

business techniques. Topics include establishing a funeral home, choosing and financing a location, building, remodeling, merchandising, caskets, vaults, and planning. Upon completion, students will be able to discuss proper procedures in operating, supervising, and owning their own funeral home. Prerequisite: none.

FSE 245F 3 0 0 3
Pathology I
This course is designed to provide the student with general knowledge of the disease process. Topics include pathological terminology, basic body functions, trauma, disease process, and etiology. Upon completion, students will be able to recognize various terminology used in the medical profession and will have a more acute awareness of the disease process. Prerequisite: none.

FSE 247F 3 0 0 3
Funeral Counseling
This course is a study of the principles of counseling that will be of assistance to funeral directors whose work requires counseling ability. Topics include the personality and role of the counselor, techniques of counseling, and philosophies of counseling. Upon completion, students will be able to relate more effectively to those who are experiencing the grief process. Prerequisite: none.

HEA 102 5 0 0 5
Personal Health
This course consists of a study of influences on physical and mental health, individual practices including personal nutrition which aid in maintaining good physical and mental health throughout the life span, and responsibilities of those working with young children to maintain personal health and to serve as models for health practices. Prerequisite: none.

HEA 113 3 2 0 4
Health and Safety for Young Children
This is a study to promote understanding of factors which influence physical and emotional health of infants and young children. Emphasis will be given to preventative measures such as designing a safe and stimulating outside play area. The course will embrace first aid techniques and allow for observation of children in play situations. The influence of child care workers on health and safety and on the teaching of health habits is emphasized. Prerequisite: none.

HET 1101 6 0 12 10
Heating Systems
This course includes oil burner fundamentals; operation, control, and service of oil burner systems; gas heating devices; operation, control and service of gas burner systems; installation and service of electric heating elements and their controls; principles of operation of hot water and low pressure systems; and the installation and service of piping, controls, pumps, and coils. Prerequisite: AHR 1105.

HET 1101A 3 0 6 5
Heating Systems (Part I)
This course is the first of a two-part course and it includes oil burner fundamentals; operation, control, and service of oil burner systems; gas heating devices; operation, control and service of gas burner systems; installation and service of electric heating elements and their controls; principles of operation of hot water and low pressure systems; and the installation and service of piping, controls, pumps, and coils. Prerequisite: AHR 1105.

HET 1101B 3 0 6 5
Heating Systems (Part II)
This course is the continuation of HET 1101A. Prerequisites: AHR 1105 and HET 1101A.

HIS 101 5 0 0 5
History of Western Civilization I
This course consists of a survey of social, political and economic developments from antiquity to the Enlightenment. Prerequisite: satisfactory score in reading on placement test.

HIS 102 5 0 0 5
History of Western Civilization II
This course consists of a survey of social, political and economic developments from the Age of Absolutism to the present. Prerequisite: satisfactory score in reading on placement test.

HIS 111 5 0 0 5
American History
This course presents a survey of the development of the United States from its old-world background to the present. Emphasis will be placed on major economic, political, and social forces which have contributed to the building of American culture. Prerequisite: satisfactory score in reading on placement test.

HIS 150 5 0 0 5
American History to 1865
This course describes American History from the period of exploration and the colonial period through the Civil War. Emphasis will be placed on the European background of American History, establishment of English colonies in America and colonial historical development; the conflict with England and the securing of independence; the establishment of independent government and the inauguration of a new nation; territorial expansion and the westward movement; the growth of democracy and social reforms; development of national feeling and sectional tensions; the institution of slavery and the slavery controversy; and the Civil War. Prerequisite: satisfactory score in reading on placement test.

HIS 151 5 0 0 5
American History since 1865
In this course, emphasis is placed on the political, constitutional, economic and social problems resulting from Reconstruction and the rise of "Big Business"; the emergence of the United States as a world power; World War I, prosperity, the Depression and the New Deal; the Second World War; the Korean and Vietnam conflicts; and the position of the United States in the contemporary world community. Prerequisite: satisfactory score in reading on placement test.

HOR 130 1 2 0 2
Introduction to Floral Design
This course will be an introduction to the principles and mechanics of floral design. It will include the study of design principles, the geometric forms of flower arrangements and the mechanics of assembling floral arrangements. Floral designs for such occasions as weddings, receptions, holidays, and funerals will be included. Prerequisite: none.

HOR 140 2 4 0 4
Home Maintenance
This course concentrates on the jobs associated with maintaining a lawn and home surroundings throughout the year. Instruction includes shrub fertilization, tree fertilization, disease control of lawns and shrubs, pruning, proper irrigation of shrubs and lawns, and proper use of herbicides and pesticides. It is designed for people interested in making home maintenance their choice of career work. Prerequisite: none.

HOR 145 4 2 0 5
Entomology and Pathology
This course is a study of insects that attack ornamental plant materials. The nature, structure, and importance of each insect are studied in detail. Additional emphasis is placed upon detection, identification, and control of the insects studied. Methods for controlling diseases of ornamental crops are learned by studying the structure, life history, and identification of the various parasitic disorders which plague ornamental trees, shrubs, flowers, and turf. Prerequisite: none.

HOR 150 3 0 0 3
Interior Plants
Instruction in this course includes simple botany, taxonomy, physiology, identification, culture, and care of house plants. One hundred of the more common indoor plants will be studied and identified. Prerequisite: none.

HOR 151 3 4 0 5
Plant Identification I
This course is an introduction to the woody plant materials grown in nurseries for landscape purposes and those found in woodlands and fields of North Carolina. The major emphasis is on deciduous shrubs and small trees. Prerequisite: none.

HOR 152 3 4 0 5
Plant Identification II
Additional trees and shrubs are studied in this course. The major emphasis is placed upon a detailed study of broad-leaved and narrow-leaved evergreens. Prerequisite: HOR 151.

HOR 153 3 2 0 4
Greenhouse Management
Greenhouse Management concentrates on procedures and practices of greenhouse plant production. This course also provides instruction in the construction and management of plastic and glass greenhouses, including heating, lighting, ventilation, and humidity. Crop studies include both cut flowers and pot plant crops. Prerequisite: none.

HOR 170 4 2 0 5
Plant Science
This is an introductory general botany and plant science course covering the fundamental principles of reproduction, growth functions, and development of seed bearing plants. Prerequisite: none.

HOR 180 2 2 0 3
Bedding Plant Production
This course is designed to enable students to start plants from seed and grow them to a marketable stage through use of proper cultural practices. Prerequisite: none.

HOR 185 5 2 0 6
Soil Science and Fertilizer
This course deals with the basic principles of efficient classification, evaluation and management of soils. Upon completion of this course, the student should be able to demonstrate proper care, cultivation, fertilization, and conservation of soil. Prerequisite: none.

HOR 200 0 0 30 3
Practicum
This course will expose students to the physical aspects of jobs available in their chosen field and provide them opportunities for the development of personal relationships. Students will acquire the skills and practical knowledge necessary for success in their chosen career fields. Prerequisite: must be second-year horticulture student.

HOR 201 3 0 0 3
Horticultural Chemicals
This course is designed to enhance the student's understanding of horticultural chemicals. Instruction will focus on the importance of horticultural chemicals, ingredients, formulation, and application with special emphasis on the effective and safe utilization of chemicals in horticultural pest control. Although the major emphasis is weed identification and those chemicals utilized for weed control, part of the course will be devoted to insecticides, fungicides, and others. Prerequisite: none.

HOR 210 5 0 0 5
Field Analysis
Students will keep records of the experiences in HOR 200 Practicum. They will relate such experiences to the following major areas of instruction: plant materials, plant science, soil science and fertilizers, horticultural chemicals, landscape construction, landscape gardening, plant propagation, and nursery management. Records compiled by the student will be summarized in the form of a weekly report and reviewed by the instructor. These reports will culminate in a final term paper. Prerequisite: must be a second-year horticulture student who is also registered for HOR 200 practicum.

HOR 220 4 0 0 4
Vegetable and Flower Gardening
Upon completion of this course, the student will be able to plan effectively a complete vegetable garden that will encompass the entire year. The student will also learn how to grow vegetables properly by use of insecticides, herbicides, and proper fertilization. If possible, the students will have a garden to take care of so that they might carry out the practices they learn. This is to be a self-study course with help from the supervising instructor. Prerequisite: this course is for second-year horticulture students who are enrolled in HOR 200 practicum.

HOR 240 4 2 0 5
Landscape Construction I
This course deals with the actual construction of brick patios, walks, steps, brick borders, brick walls around trees, lawn furniture, picnic tables, or other wood projects which may be used in a home landscape. It will also cover estimating the job cost of these various projects, including drawing plans to scale. Prerequisite: none.

HOR 241 4 2 0 5
Landscape Construction II
This course will be a continuation of HOR 240, Landscape Construction I, with added emphasis on students actually carrying out projects from planning stage to completion. Other skills will be acquired through additional projects. Prerequisite: HOR 240.

HOR 251 3 4 0 5
Landscape Design I
This course is an introduction to and study of the basic principles of landscape design. Considerable emphasis is placed on the problems associated with residential site development, including blueprint reading. Laboratory time is devoted to visiting established residential sites. The course is not oriented toward a mastery of creativity and artistry, but toward an understanding of certain principles fundamental to all landscape design endeavors. Prerequisites: HOR 151 and HOR 152.

HOR 252 3 4 0 5
Landscape Design II
Upon completion of this course, the student will be able to develop and maintain landscaped areas, including planting, pruning, fertilization, and pest control. In addition to acquiring skills in selection and use of materials in landscape construction, the student will also receive instruction in the fundamentals of landscape economics,

including costs, contracts, and calculation of areas, volumes, and plant quantities. Prerequisites: HOR 151, HOR 152, and HOR 251.

HOR 254 3 2 0 4
Plant Propagation
This course is a study of the basic concepts and principles of sexual and asexual propagation. Propagation techniques are utilized in the industry and studied through practical exercises conducted in laboratory sessions. Prerequisite: none.

HOR 256 2 4 0 4
Nursery Management I
This is an introductory study of nursery operations designed to acquaint the student with the diversity of nursery plant production, equipment, and operation. The theory and practices necessary to produce profitable nursery stock will be acquired through the study of such areas as pruning, fertilization, plant protection, and others. Prerequisite: none.

HOR 257 2 4 0 4
Nursery Management II
This course is a continuation of HOR 256, Nursery Management I, with increased emphasis placed upon production schedules and choice and quantities of stock to be grown as well as developing cost data, price schedules, and record keeping for economically important nursery crops. Planning of nursery layout and facilities is also covered. Prerequisite: HOR 256.

HOR 258 3 2 0 4
Turf Practices
This course is a study of special-purpose turf grasses, including identification, use, establishment, and maintenance of specific grasses. Laboratory time is used for field trips to golf courses where students observe and participate in those operations required to maintain a healthy, vigorous playing surface. Prerequisite: HOR 185.

HOR 259 1 2 0 2
Garden Center Management
This course covers all phases of garden center operation, including some of the major problems. Areas of study include layout, stocking, product knowledge, traffic flow, seasonal fluctuations, risks, diversification, and merchandising. Ample time will be devoted to visitations to established garden center operations. Prerequisite: none.

HUM 1101 3 0 0 3
Humanities for Vocational Students
This course is designed to help students recognize the importance of values through cultural, economic, political and geographical considerations affecting themselves and their relationship with others, both personally and professionally. Prerequisites: none.

ISC 202 3 2 0 4
Quality Control
This course is a study of the principles and techniques of quality control and cost savings; organization and procedure for efficient quality control; functions, responsibilities, structures, costs, reports, personnel, and vendor-customer relationships in quality control; and sampling inspections, process control, and tests for significance. Prerequisite: MAT 102.

ISC 203 3 2 0 4
Motion and Time Study
This course includes a study of operations analysis, types of process charts, breakeven analysis, micromotion analysis, work measurement techniques, predetermined time systems (MTM), and development of standard data for incentive systems. Prerequisite: none.

ISC 209 3 2 0 4
Plant Layout
This course is a practical study of factory planning, with emphasis on the most efficient arrangements of work areas to achieve lower manufacturing costs. Included are layouts for small and medium-sized plants; layout fundamentals; selection of production equipment and materials handling equipment; and the effective management of people, money, and materials in a manufacturing operation. Prerequisite: none.

ISC 212 2 2 0 3
Engineering Economic Analysis
This course introduces the student to basic concepts and computations used in engineering economic analysis. The course is designed for a student unacquainted with economics and engineering principles. A building block approach is used to develop basic computational skills and techniques to evaluate alternatives in order to facilitate the process of decision making with respect to industrial-based investments. The student will be introduced also to computerized analysis. Prerequisite: MAT 102 or departmental permission.

LEG 103D 4 0 0 4
Evidence of Paralegals
A study of basic evidence law principles and the relationship of these principles to the investigation and preparation stages of civil and criminal court actions. Prerequisite: none.

LEG 115D 3 0 0 3
Paralegal in the Legal System
An introduction to the role of the paralegal in the legal system, government and business, plus study of the legal restrictions of the practice of law and ethical responsibilities of the lawyer and the paralegal in the legal system. Prerequisite: none.

LEG 132D 3 2 0 4
Legal Research
Methods of legal research, proper citation of authority, acquaintance with legal resources such as statutes and case reporters, shepardizing of cases and synthesis of decisions. Emphasis on computer-assorted legal research. Also, introduction to legal writing form and technique, including preparation of simple briefs and memoranda. Prerequisite: none.

LEG 134D 2 0 0 2
Legal Writing
Utilizing research skills learned in LEG 132, students will be introduced to legal writing form and techniques, including preparation of case briefs and research memoranda. Prerequisite: LEG 132.

LEG 135D 4 0 0 4
Legal Systems I
An introduction to the legal systems in federal courts and in North Carolina state courts from the trial level to the highest appellate levels. Emphasis will be on court procedures in civil cases. Included will be a study of the clerk of superior court functions in the North Carolina legal system. Prerequisite: none.

LEG 136D II 4 0 0 4
Legal Systems
A continuation of LEG 135D with emphasis on practical application and an introduction to often-used procedural forms. Prerequisite: LEG 135D.

LEG 207D 1 2 0 2
Legal Software
An introduction to software programs developed for the practice of law which will include the following areas: estate planning, real estate transactions, law office management, and family law. Prerequisite: four quarters in program or permission of instructor.

LEG 213D 3 0 0 3
Law and the Family
The legal obligations in a marriage; rights and privileges of the parties; the statutory grounds for divorce; defenses to divorce actions; elements of a legal separation by a court order or by mutual consent. Family problems, juvenile courts, legal proceedings in adoption and custody cases will also be studied. Prerequisite: none.

LEG 214D 2 0 0 2
Domestic Law Documents
This course is designed to supplement Law and the Family for paralegal students. The course will introduce the student to the preparation of documents required for domestic relations problems, including divorce, child custody and support, alimony, enforcement of support orders, and adoption. Prerequisite: LEG 213D.

LEG 223D 4 0 0 4
Investigation of Civil Claims
An in-depth study of investigative methods necessary for gathering, preserving, and analyzing evidence for effective presentations of civil actions. Included are interviews, preservation of witness statements, collection and interpretation of medical information, collection of other evidence, scene diagrams, legal research, organization and assemblage of evidence for attorney use. Prerequisites: BUS 115, LEG 135D, or permission of instructor.

LEG 225D 4 0 0 4
Law Office Management
A study of the organization and management of law offices, with emphasis upon administrative systems and procedures for efficient law office operation. Included are studies of personnel management; law office equipment, furnishings and layout; filing systems; systems for keeping track of deadlines; and accounting, billing, and timekeeping systems. Prerequisite: none.

LEG 227D 4 0 0 4
Estate Management I
This course teaches interview techniques and gathering of data for preparation of wills and estate plans. Basic estate and trust principles will be included. Also, the student studies procedures for administration of estates of deceased persons, minors, and incompetents, including preparation of

inventories, accounts, inheritance and estate tax returns, and other administrative documents. This introduction is expanded into more detailed coverage in LEG 228D. Prerequisite: none.

LEG 228D 4 0 0 4
Estate Management II
A continuation of LEG 227D, Estate Management. Prerequisite: LEG 227D.

LEG 230D 4 0 0 4
Bankruptcy & Collection Procedures.
The student will be introduced to the federal bankruptcy laws and the procedures and documents required of persons involved in bankruptcy and debt adjustment proceedings. Also covered will be the processes used by attorneys for the collection of debts, including enforcement of judgments. Prerequisites: none.

LEG 235D 4 0 0 4
Litigation Preparation
Study of the steps in aiding an attorney in preparing a civil case for trial, emphasizing preparation of a trial notebook, organization of discovery and other trial materials, and preparation of witnesses for trial. Also, preparation of workers' compensation claims is included. Prerequisites: LEG 136D.

LEG 261D 1 0 10 2
Clinical Practice
This course provides students with an opportunity to gain, under staff supervision, practical on-the-job experience in the paralegal field as an integral part of their formal education. Periodic conferences between the student, instructor, and employer and periodic seminars with others enrolled in clinical practice provide opportunities to assess the learning achieved by the student in the work experience. Prerequisites: four quarters in the Paralegal curriculum and permission of the instructor. Students are graded pass or fail.

LEG 280D 3 0 0 3
Business Organizations Law
A summary of the individual, partnership, and corporate forms of doing business, including professional associations, limited liability of corporations, and tax advantages. Emphasis is placed upon gathering appropriate data to support the making of the decision, gathering data to support the preparation of the documents when the decision is made, and the processing of the documents when they have been prepared. Servicing the corporation. Scheduling of annual meetings, preparations of reports, tax returns, and the like. Prerequisite: BUS 115 or permission of instructor.

LEG 282D 4 0 0 4
Property Transactions I
An introduction to basic concepts of real property with emphasis on the mechanics of conveyances and encumbrances of real property. Basic provisions of deeds, mortgages, and deeds of trust, and the more common problems in real property titles will also be studied. Prerequisite: none.

LEG 283D 4 0 0 4
Property Transactions II
A study of the mechanics of simple title searches and examinations with practical experience in the use of courthouse records and preparation of suggested title certificates for approval by the title attorney. Also studied will be the mechanics of land sale closings—including the preparation and recording of simple deeds and deeds of trust; preparation of other land sale and loan closing documents, and the handling and disbursement of land sale and loan closing funds. Prerequisite: LEG 282D.

MAT 001 5 0 0 0
Structure of Arithmetic
This course is designed to help the student gain and improve computational skills. Instruction is in the basic operations of arithmetic to include addition, subtraction, multiplication and division of whole numbers, fractions, decimals, and percents. Prerequisite: none.

MAT 002 5 0 0 0
Prebusiness Mathematics
This course is a review and reinforcement of the basic mathematical skills used in business mathematics. Prerequisite: none.

MAT 003 5 0 0 0
Introductory Algebra
This course is designed to provide the student with the basic understanding and manipulative skills of elementary algebra, with some basic applications. It includes whole numbers, fractions, signed numbers, first degree equations, exponents, polynomials, factoring, rational expressions and graphing. Prerequisite: none.

MAT 004 5 0 0 0
Intermediate Algebra
This course is designed for those students who have had some previous instruction in algebra. Basic concepts of algebra are cov-

ered. It includes the real number system, first degree equations, polynomials, factoring, rational expressions, radicals and complex numbers, quadratic equations, functions, and logarithmic functions. Prerequisite: MAT 003 or equivalent.

MAT 005 **5 0 0 0**
Geometry
This course is designed to provide the student with the basic understanding and manipulative skills of elementary geometry. Prerequisite: none.

MAT 009 **5 0 0 0**
Algebra and Trigonometry
This course is for students who need a review of algebra and trigonometry. It includes basic algebra, functions, graphs, right triangles, basic identities, equations and applications. Prerequisite: MAT 004 or equivalent.

MAT 010 **5 0 0 0**
Pre-College Algebra
This course is designed as a pre-college algebra course covering the following topics: Equations and Inequalities, Linear Functions and Inequalities in Two Variables, Polynomials and Polynomial Functions, Rational Exponents and Radical Expressions, Quadratic Functions and Inequalities, and Rational Function and Expressions. Prerequisite: MAT 004 or equivalent.

MAT 020 **3 0 0 0**
Mathematics for Health Education
This course is designed for the student who is preparing for a health career. Topics covered are basic operations of arithmetic, fractions, decimals, percents, ratio and proportion, metric system, apothecaries' system, and mathematics of drugs and solutions. Prerequisite: none.

MAT 101 **5 0 0 5**
Technical Mathematics I
This is a course in mathematics designed to support all technology courses. Topics covered are fundamental concepts and operations of algebra, functions and graphs, trigonometric functions, linear equations and determinants, factoring and fractions, quadratic equations, vectors, oblique triangles, and graphs of trigonometric functions. Prerequisite: satisfactory score on mathematics placement test or MAT 004.

MAT 102 **5 0 0 5**
Technical Mathematics II
This is a course in mathematics designed to support all technology courses. Topics covered are exponents and radicals, j-operator, logarithms, algebraic and trigonometric equations, inequalities, variations, progressions, advanced topics in trigonometry, and equations of higher degree. Prerequisite: MAT 101.

MAT 103 **5 0 0 5**
Technical Mathematics III
This is a course in mathematics designed to support all technology courses. Topics covered are the straight line, limits, geometric and algebraic interpretation of the derivative, applications of the derivative, integration, and applications of integration. Prerequisite: MAT 102.

MAT 112 **5 0 0 5**
Mathematics for the Health Sciences
This is a course in mathematics designed to support programs in the health sciences. Topics to be covered include the use of the scientific calculator, fundamentals of arithmetic and algebra, linear equations, functions and graphs, trigonometric functions, algorithms, ratio and proportion, the metric and apothecaries' systems, basic statistics, and the mathematics of drugs and solutions. Prerequisite: MAT 003 or equivalent.

MAT 113 **3 0 0 3**
Allied Health Mathematics I
This is the first of a series of two courses designed to develop a high level of proficiency in basic mathematical and algebraic skills for the student in a health center. Topics covered are whole numbers, fractions, decimals, percents, algebraic concepts, linear equations, functions and graphs, and trigonometric functions. Prerequisite: none.

MAT 114 **3 0 0 3**
Allied Health Mathematics II
This is a continuation of MAT 113, Allied Health Mathematics I. Topics covered are logarithms, ratio and proportion, metric system, apothecaries' system, mathematics of drugs and solutions, and basic statistics. Prerequisite: MAT 113.

MAT 115 **3 0 0 3**
Fundamental Concepts of Algebra
This is a general review of fundamental mathematics with emphasis on algebra and algebraic applications. Topics covered are the real number system, properties of numbers, sets, functions and relations, graphing, solution of equations and inequalities, polynomials, powers and roots, and basic

trigonometry. Prerequisite: high school algebra or MAT 003.

MAT 116 5 0 0 5
Fundamental Concepts of Statistics
This is a course in statistics designed to support all technology courses. In scope, the course consists of frequency distribution, graphic representation, percentiles, measures of central tendency, variability, the normal distribution curve, sampling error, significance of difference between means, correlation, statistics and the design of experiment, and chi-square. Prerequisite: MAT 115.

MAT 117 5 0 0 5
EDP Mathematics
This is a general course in algebraic concepts designed specifically to prepare data processing students for later course work. Hexadecimal-binary arithmetic, polynomial operations, fraction equations and quadratic equations are the primary topics covered. Prerequisite: MAT 119.

MAT 118 3 0 0 3
General Mathematics
This course is an introduction to elementary school mathematics. Topics covered are the basic operations of arithmetic with fractions, solving simple equations, and an introduction to certain concepts of modern math. Prerequisite: none.

MAT 119 5 0 0 5
Principles of Mathematics
This course is designed to give students an overview of important topics in mathematics. Topics covered are operations of arithmetic, percents, set theory, problem solving, graphs, and an introduction to the concepts of algebra, geometry and statistics. Prerequisite: high school Algebra I or equivalent.

MAT 120 5 0 0 5
Mathematical Concepts
This course is designed for the liberal arts student and will cover number systems, sets, consumer mathematics, the metric system, probability, statistics and the geometry of shape and measurement. Prerequisite: satisfactory score on mathematics placement test.

MAT 121 5 0 0 5
Statistics
This course is a study of fundamental statistical techniques, basic statistical distributions, measures of central tendency, statistical inference and sampling techniques. Prerequisite: MAT 009 or equivalent.

MAT 122 5 0 0 5
Finite Mathematics
This course includes instruction in Elementary Matrix Algebra including addition, subtraction, multiplication, and inverses; application of Matrix operations to solution of linear equations; introduction to linear programming, including Simplex technique; counting, partitioning and basic set operations; elementary probability; Markov chains; applications to selected areas in the behavioral or social sciences and business. Prerequisite: MAT 009 or equivalent.

MAT 123 5 0 0 5
College Algebra
This course is designed as a precalculus covering the following topics: fundamentals of algebra, equations, and inequalities, functions and graphs, polynomial and rational functions, exponential and logarithmic functions, systems of equations. Prerequisite: MAT 010.

MAT 124 5 0 0 5
College Trigonometry
This course is designed as a precalculus covering the following topics: algebraic preliminaries, the trigonometric functions, trigonometric identities and equations, applications of trigonometry, and analytic geometry. Prerequisite: MAT 123 or equivalent.

MAT 125 5 0 0 5
Analytic Geometry and Calculus I
This course is designed as an introduction to analytic geometry and calculus. Topics include the rectangular coordinate system, functions and graphs, limits, differentiation, applications of differentiation, and integration. Prerequisite: MAT 124 or equivalent.

MAT 126 5 0 0 5
Analytic Geometry and Calculus II
This course is a continuation of Analytic Geometry and Calculus I. Topics include trigonometric and exponential functions, techniques of integration, conic sections, and polar coordinates. Prerequisite: MAT 125 or equivalent.

MAT 127 5 0 0 5
Analytic Geometry and Calculus III
This course is a continuation of Analytic Geometry and Calculus II. Topics include infinite series, vectors, and surfaces. Prerequisite: MAT 126 or equivalent.

MAT 128 5 0 0 5

Analytic Geometry and Calculus IV

This course is a continuation of Analytic Geometry and Calculus III. Topics include partial derivatives, multiple integrals, and differential equations. Prerequisite: MAT 127 or equivalent.

MAT 130 5 0 0 5

Business Calculus

A calculus course designed to support all business courses. Topics covered are differentiation, applications of differentiation, exponential and logarithmic functions, integration, applications of integration, functions of several variables, and trigonometric functions. Prerequisite: MAT 123.

MAT 201 5 0 0 5

Technical Mathematics IV

This is a course in mathematics designed to support the electronics technology curriculum. Topics covered are advanced concepts of a differential and integral calculus, the Maclaurin series, series expansions, and differential equations and applications. Prerequisite: MAT 103.

MAT 1101 5 0 0 5

Fundamentals of Mathematics

This course will give the student practical number theory and analysis of the following basic operations: fractions, decimals, powers and roots, percentages, ratio and proportion, basic algebra and formulas. Prerequisite: none.

MAT 1102 5 0 0 5

Algebra

This course covers the following basic concepts and operations of algebra: historical background of our base-10 number system, algebraic operations (addition, subtraction, multiplication, and division), fractions, letter representation, grouping, factoring, ratio and proportion, variations, graphical and algebraic solution of first-degree equations, solution of simultaneous equations by addition and subtraction, graphing, exponents, logarithms, tables, and interpolation. Prerequisite: none.

MAT 1103 3 0 0 3

Geometry

This course covers fundamental properties and definitions, plane and solid geometric figures, selected general theorems, and geometric construction of lines, angles, and plane figures. Also included are areas of plane figures, volume of solids, and geometric principles applied to shop operations. Prerequisite: none.

MAT 1104 3 0 0 3

Trigonometry

This course covers trigonometric ratios, solving problems with right triangles, using tables and interpolating, solution of oblique triangles using law of sines and law of cosines, graphs of the trigonometric functions, inverse functions, trigonometric equations, and all topics are applied to practical problems. Prerequisite: MAT 1102.

MAT 1114 5 0 0 5

Carpenter's Mathematics

This course includes practical problems which the carpenter must frequently solve including the fundamental ideas in geometry, areas, triangles, circles and volumes of geometric solids and cylinders. Prerequisite: MAT 1101 or equivalent.

MAT 1115 5 0 0 5

Elements of Mathematics I

A course designed for Electronic Servicing to include review of arithmetic, powers of ten, exponents, fundamentals of algebra, linear equations, fractions and applications. Prerequisite: none.

MAT 1116 3 0 0 3

Elements of Mathematics II

A course designed for Electronic Servicing to include trigonometry, complex numbers, quadratic equations, logarithms and applications. Prerequisite: MAT 1115 or equivalent.

MEC 101 1 0 6 3

Machine Processes I

This is an introductory course designed to acquaint the student with basic hand tools, safety procedures, and machine processes in our modern industry. The course includes a study of measuring instruments, characteristics of metals, and cutting tools. The student will become familiar with the lathe family of the machine tools by performing selected operations such as turning, facing, threading, drilling, boring, and reaming. Prerequisite: none.

MEC 102 1 0 6 3

Machine Processes II

This course covers advanced operations on lathe, drilling, boring, and reaming machines. The types of milling machines, cutter, jig, fixture devices, the accessories used in a modern industrial plant, and safety in the shop are also studied. Prerequisite: MEC 101.

MEC 104 5 0 0 5
Applied Mechanics
This course covers the concepts and principles of statics, parallel, concurrent and noncurrent force systems in coplanar and noncoplanar situations, concepts of centroids and center of gravity, and moments of inertia. Prerequisites: MAT 103 and PHY 111.

MEC 180 3 0 3 4
Programming for Manufacturing
This is a course in the planning, organizing, and execution of programs to improve manufacturing processes through the use of the microcomputer. Prerequisites: CET 106 and MEC 201 or by permission of department chairperson.

MEC 201 1 0 6 3
Manufacturing Processes I
The newer concepts of work handling, automatic machining processes, chipless production, new techniques in metal forming, analysis of high-energy forming, ultrasonic machining, electrolytic metal removal, chemical milling, computer numerical control system, and production methods in manufacturing are covered. Prerequisite: MEC 102.

MEC 202 2 0 6 4
Manufacturing Processes II
The newer concepts of work handling and automatic machining processes are emphasized. Concentrated study of production methods in manufacturing is included. Prerequisite: MEC 201.

MEC 203 2 0 3 3
Welding Processes
This is basic study of all popular welding processes, including basic gas welding, basic arc, MIG, TIG, automatic flame cutting, and process applications. Operation of each process is limited to the extent required. Prerequisite: none.

MEC 205 3 2 0 4
Strength of Materials
This course includes a study of principles and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying, and dynamic. An analysis of these stresses is made as applied to riveted and welded joints, beams, columns, and other components. Prerequisite: MEC 104.

MEC 206 3 4 0 5
Process Analysis and Estimating
This course focuses on the planning of operation sequences for efficient production, tool planning, and estimating. The operation of machine tools in production projects is required in laboratory exercises. Prerequisite: none.

MEC 210 3 0 3 4
Ferrous Metallurgy
This course is a beginning course in the field of metallurgy. The first quarter is concerned with the extraction, characteristics, and uses of ferrous metals. The student is given the opportunity to use basic metallurgical equipment during the laboratory part of the course. Prerequisite: PHY 112.

MEC 230 3 2 0 4
Hydraulics and Pneumatics
This is a course to introduce the student to the basic principles of hydraulics and pneumatics. General applications of fluid power systems will be studied, and the use of pneumatics in instrumentation and control will be covered. Prerequisites: PHY 111 and MAT 103.

MEC 235 3 0 3 4
Fluid Power
This course includes the basic theories of hydraulic and pneumatic systems; combinations of systems in various circuits; and the basic designs and functions of circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulators, and reservoirs. Prerequisites: PHY 111 and MAT 103.

MEC 237 3 2 0 4
Control Systems
This course covers the basic principles of electrical, electronic, and pneumatic control systems as related to industrial applications. The basic design and functions of circuits, motors, transducers, and servomechanisms, and a review of the National Electrical Code are included. Prerequisite: PHY 113.

MEC 240 3 2 0 4
Introduction to Robotics and CIM
This is a fundamental course in safe application, programming, and maintenance of robot devices and the relationship between robotics and computer integrated manufacturing (CIM) at the systems level. Prerequisites: MEC 235, MEC 237, and MEC 180.

MEC 1101 4 0 12 8
Machine Shop Theory & Practice I
This course provides an introduction to the machinist trade and the potential it holds

for craftsmen. It deals primarily with the identification, care, and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes on the lathe drill press, grinding (off-hand) machines, and milling machines are introduced both in theory and practice. Prerequisite: none.

MEC 1101A 2 0 6 4
Machine Shop Theory & Practice I (Part I)
This is the first part of a two-part course that provides an introduction to the machinist trade and the potential it holds for craftsmen. It deals primarily with the identification, care, and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes on the lathe drill press, grinding (off-hand) machines, and milling machines are introduced both in theory and practice. Prerequisite: none.

MEC 1101B 2 0 6 4
Machine Shop Theory & Practice I (Part II)
This course is a continuation of MEC 1101A. Prerequisite: MEC 1101A.

MEC 1102 4 0 12 8
Machine Shop Theory & Practice II
Instruction is provided on advanced operations using layout tools and procedures, power sawing, drill press, surface grinder, milling machine, and shaper. Students will be introduced to the basic operations of the cylindrical grinder and select projects encompassing all the operations, tools, and procedures thus far used and those to be stressed through the course. Prerequisite: MEC 1101.

MEC 1102A 2 0 6 4
Machine Shop Theory & Practice II (Part I)
This is the first part of a two-part course that includes instruction on advanced operations using layout tools and procedures, power sawing, drill press, surface grinder, milling machine, and shaper. Students will be introduced to the basic operations of the cylindrical grinder and select projects encompassing all the operations, tools, and procedures thus far used and those to be stressed through the course. Prerequisite: MEC 1101A & MEC 1101B.

MEC 1102B 2 0 6 4
Machine Shop Theory & Practice II (Part II)
This course is a continuation of MEC 1102A. Prerequisite MEC 1102A.

MEC 1103 3 0 12 7
Machine Shop Theory & Practice III
This course provides advanced work on the engine lathe; turning, boring, and threading machines; grinders; milling machine; and shaper. An introduction to basic indexing and terminology with additional processes on calculating, cutting, and measuring of spur, helical, worm gears, and wheels is provided. The use of precision tools and measuring instruments such as vernier height gages, protractors, and comparators is provided. Basic exercises are done on the turret lathe and on the tool and cutter grinder. Prerequisite: MEC 1102.

MEC 1103A 2 0 6 4
Machine Shop Theory & Practice III (Part I)
This is the first part of a two-part course that provides advanced work on the engine lathe; turning, boring, and threading machines; grinders; milling machine; and shaper. An introduction to basic indexing and terminology with additional processes on calculating, cutting, and measuring of spur, helical, worm gears, and wheels is provided. The use of precision tools and measuring instruments such as vernier height gages, protractors, and comparators is provided. Basic exercises are done on the turret lathe and on the tool and cutter grinder. Prerequisite: MEC 1102A and MEC 1102B.

MEC 1103B 1 0 6 3
Machine Shop Theory & Practice III (Part II)
This course is a continuation of MEC 1103A. Prerequisite: MEC 1103A.

MEC 1104 3 0 12 7
Machine Shop Theory & Practice IV
Class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly, and inspection are developed. The instruction provides for additional processes on the turret lathe, tool and cutting grinder, cylindrical and surface grinder, and advanced milling machine operations. Special procedures and operations, processes and equipment, faithful observance of safety procedures, and establishment of good work habits and attitudes acceptable to the industry are stressed. Prerequisite: MEC 1103.

MEC 1112 1 0 3 2
Machine Shop Processes
This course acquaints the student with the procedures of layout work and the correct use of hand and machine tools.

Experiences in the fundamentals of drill press and lathe operations, hand grinding of drill bits and the lathe tools, and set-up work applied to the trade are provided. Prerequisite: none.

MEC 1113 1 0 3 2
CNC Lathe Operation
This course is an introduction to CNC machining and the operation of the CNC Lathe. A study of "G" codes, program writing, loading programs into the machine, editing programs, and the running of programs on the CNC Lathe are also included. Corequisite: MEC 1103 or equivalent machine shop experience. Prerequisite: MEC 1102 or equivalent machine shop experience.

MEC 1114 1 0 3 2
CNC Milling Machine Operation
This course will cover an introduction to CNC machining, the operation of the CNC vertical mill, a study of "G" and "M" codes, program writing, loading programs into the vertical mill, editing programs, and the running of programs on the CNC vertical mill. Corequisite: MEC 1104 or equivalent machine shop experience. Prerequisite: MEC 1103 or equivalent machine shop experience.

MEC 1115 2 0 3 3
Metallurgy for Machinists
This course provides an investigation into the properties of metals and tests to determine their uses. It includes the study of chemical, physical and mechanical properties of metals. Topics to be studied are identification of metals, extracting of metals from ores, classification of metals, heat treating of metals, and testing of metals. Prerequisite: none.

MEC 1117 2 0 3 3
Metallurgy for Welders
This course is specifically designed to introduce the welding student to the science of metallurgy with the aim of providing an understanding of the effects of welding heat upon the metals being joined. An understanding of the proper heat treatments of both ferrous parts and nonferrous parts gives students insight into how heat affects the welding process. During this course, the welder is introduced to hardness testing, mechanical testing, mechanical and nondestructive testing of welds, and metallographic techniques including microscopic examination of the structures of metals. Prerequisite: none.

MEC 1120 1 0 6 3
Machine Processes
This course is the study of practices used in metalworking shops and an introduction to how materials can be utilized. Demonstration of the metalworking lathes, drills, milling machines, shapers, and a study of the capabilities of these machines are also included. Prerequisite: none.

MED 100 3 0 0 3
Introduction to Medical Assisting
This course is designed to introduce the student to the medical assisting profession. The student will also be introduced to the legal aspects of the medical practice and be prepared to meet the legal and ethical responsibilities of the allied health professional. Prerequisite: none.

MED 101 3 0 0 3
Medical Terminology I
This course is designed to provide a foundation for the study of medical terminology. Medical prefixes, suffixes and combining forms will be introduced followed by individual body system terminology. Students will be able to build medical words and to analyze word components. Prerequisite: none.

MED 102 3 0 0 3
Medical Terminology II
This course is designed to complete the body system terminology. Upon successful completion of this course, students should be able to pronounce, spell, and define medical terms as they pertain to anatomy, physiology, disease processes, laboratory tests, medical procedures, and abbreviations. Students will demonstrate the ability to build medical words and to analyze word components. Prerequisite: MED 102.

MED 125 3 2 0 4
Medical Administrative Office Procedures I
Students will be able to demonstrate skills in effective telephone technique, patient reception, appointment scheduling and time management, medical records management, handling mail, and processing written communications. Prerequisite: BUS 103.

MED 126 3 2 0 4
Medical Administrative Office Procedures II
This course will introduce students to the management of space and equipment, safety and security considerations, qualities of a

supervisor, and management duties. Students will also study the pegboard accounting system, banking services and procedures, petty cash, and billing and collecting procedures. Prerequisite: MED 125.

MED 127 3 0 0 3
Medical Law
This course is designed to introduce students to legal aspects of the medical practice and prepare them to meet the legal responsibilities of the allied health professional. Prerequisite: none.

MED 206 3 0 0 3
Medical Assisting Seminar
Discussion of problems encountered during the practicum and their solutions. Emphasis is on sharing practicum experiences and review of medical assisting procedures. Corequisite: MED 210.

MED 210 0 0 30 10
Clinical Lab
This course is a practicum in Medical Assisting. The student is placed in a medical facility to assume the administrative, clinical, and laboratory responsibilities of the physician's office. Prerequisite: completion of first six quarters of Medical Assisting curriculum.

MED 220 2 2 0 3
Pharmacology
This course introduces students to drug legislation, pharmacology terms and abbreviations, and the systems of measurement used to compute dosages. Students learn to identify major drugs and/or drug groups, recognize side effects, methods of administration, and drug reactions. Prerequisite: completion of first four quarters of Medical Assisting curriculum.

MED 225 3 0 0 3
Medical Insurance/Coding
This course introduces students to medical insurance and prepares them to assume the responsibility of preparing, filing, and assisting the patient with claims. CPT coding and ICD-9 coding are stressed. Prerequisite: completion of first five quarters of Medical Assisting curriculum.

MED 250 3 6 0 6
Exam Procedures I
This course prepares the student to assist the physician in patient preparation, history taking, diagnostic procedures, and treatments. The principles of medical and surgical aspects are also stressed. Prerequisite: completion of first four quarters of Medical Assisting curriculum.

MED 255 2 4 0 4
Exam Procedures II
This course continues to prepare the student to assist the physician with more complicated procedures. Procedures will include minor surgery and electrocardiograms. Prerequisite: MED 250.

MED 260 2 4 0 4
Lab Procedures I
This course will introduce students to laboratory rules of safety. Students will demonstrate handling equipment in a safe, responsible manner and to identify equipment, glassware, and supplies by sight and use. Student will also demonstrate basic knowledge of simple laboratory tests done in a physician's office by performing the test with accuracy, speed, personal integrity, and complete honesty. Collection and handling of samples and patient preparation are stressed. Prerequisite: completion of first four quarters of Medical Assisting curriculum.

MED 265 2 4 0 4
Lab Procedures II
The student is prepared to perform more complicated laboratory procedures. Microbiology, collecting and handling of cultures and advanced testing are stressed. Prerequisite: MED 260.

MUS 150 5 0 0 5
Music Appreciation
This course is designed to provide an introduction to all phases of music with the aim of developing a deeper understanding and appreciation of the field. Lectures, discussions, and listening assignments will cover the materials and elements, the forms and genres, and the periods and styles of music, as well as the contributions of the major composers. Prerequisite: none.

NMT 100 1 2 3 3
Introduction to Nuclear Medicine Technology
This course will provide the student with a comprehensive introduction to the field of nuclear medicine technology. The course will provide an overview of the school, program, profession, and history of the profession; examine the types of procedures performed in nuclear medicine, general patient care and radiation safety practices; familiarize the student with the clinical areas and provide the student with the opportunity to

acquire some basic clinical skills. Prerequisite: none.

NMT 106 2 0 0 2
Nuclear Medicine Technology II
This course will introduce students to their responsibilities as health care personnel. The emphasis of the course will be on various aspects of the student-patient relationship. The course will also deal with other interpersonal relationships that the students will face as members of the health care team. Prerequisite: NMT 100.

NMT 107 2 2 0 3
Nuclear Medicine Technology III
This course will introduce the student to the instrumentation of nuclear medicine and the area of the radiopharmacy. The emphasis of the course will be on the practical aspects rather than the theoretical aspects. Prerequisite: NMT 106.

NMT 108 3 0 0 3
Nuclear Medicine Technology IV
This course deals with In Vivo nuclear medicine procedures. A cookbook type of format will be used to present routine In Vivo procedures. Prerequisite: none.

NMT 111 2 0 0 2
Principles of Nuclear Medicine I
This course will deal with In Vivo nuclear medicine procedures. During the course, the students will examine studies pertaining to the central nervous system, pulmonary system, and gastrointestinal tract. Prerequisite: NMT 108.

NMT 116 2 0 0 2
Nuclear Physics
This course covers nuclear decay schemes and more complicated concepts of radioactive decay. Also discussed are interactions of radiation with matter and the calculations and measurement of radiation doses. Prerequisite: PHY 102.

NMT 117 2 0 0 2
Health Physics
During this course, students will study protective regulations, monitoring methods, techniques for reducing exposure of patients and technologists, and the Nuclear Regulatory Commission and N.C. Radiation Protection Program requirements. Prerequisite: none.

NMT 119 0 2 6 3
Introduction to Clinical Practice I
This is the first of a two-course series designed to introduce the student to the clinical practice of nuclear medicine technology. During the course, the student will be assigned to four clinical rotations. The student will assist the supervising technologist with the routine duties of each rotation. Prerequisite: NMT 100.

NMT 124 0 0 12 4
Introduction to Clinical Practice II
This is the second course in a two-course series designed to introduce the student to the clinical practice of nuclear medicine technology. During this course, the student will be assigned to six clinical rotations. The student will assist the supervising staff technologist with the routine duties of each rotation. Upon completion of this course, the student will have been exposed to all phases of the clinical practice. Prerequisite: NMT 100.

NMT 201 0 0 21 7
Clinical Practice
This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 100, NMT 119, NMT 124, and BIO 108.

NMT 202 0 0 21 7
Clinical Practice
This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 100, NMT 119, NMT 124, and BIO 108.

NMT 203 0 0 21 7
Clinical Practice
This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 100, NMT 119, NMT 124, and BIO 108.

NMT 204 0 0 21 7
Clinical Practice
This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an

opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 100, NMT 119, NMT 124, and BIO 108.

NMT 213 3 0 0 3

Principles of Nuclear Pharmacy

Students will receive classroom instruction related to the operation of a nuclear pharmacy. Topics covered will include mathematics, radionuclide generators, radiopharmaceuticals, quality control of radiopharmaceuticals, and common nuclear pharmacy procedures. Prerequisite: none.

NMT 220 2 0 0 2

Instrumentation I

This course will provide the students with basic information about nuclear medicine instrumentation. The course will focus on the operation of components that are common to the majority of the instruments used in nuclear medicine. In addition to the common components, the course will also examine the operation and utilization of common auxiliary devices. Prerequisites: MAT 116 and PHY 102.

NMT 221 2 0 0 2

Principles of Nuclear Medicine II

This course will deal with In Vivo nuclear medicine procedures. During the course, the students will examine studies pertaining to the skeletal system, the cardiovascular system, and the thyroid gland. Prerequisite: NMT 108.

NMT 225 3 0 0 3

Computers in Nuclear Medicine

This course will provide the student with a general introduction to the operation of computers and the application of computers to the field of nuclear medicine. Prerequisite: NMT 107.

NMT 231 2 0 0 2

Principles of Nuclear Medicine III

This course deals with In Vivo nuclear medicine procedures. During the course, the students will examine the studies pertaining to the urinary system, In Vivo lab procedures, and therapy procedures. Prerequisite: NMT 108.

NMT 235 2 2 0 3

Instrumentation II

This course will develop the students' understanding of the use of nuclear counting statistics and the operation of nuclear medicine instruments. The primary focus of the course will be on theory of operation of gas detectors and sodium iodide scintillation detectors. In addition, the students will examine the operational characteristics, quality control procedures, and practical utilization of selected instruments. Prerequisite: NMT 220.

NMT 245 2 2 0 3

Instrumentation III

This is the last of three courses designed to develop the students' understanding of nuclear medicine instruments. The content of the course will include collimators, rectilinear scanners, gamma cameras, and computers. The primary focus of the course will be on theory of operation, operational characteristics, quality control procedures, and the practical utilization of the instruments covered. Prerequisite: NMT 220.

NMT 251 2 2 0 3

Principles of In Vitro Nuclear Medicine I

This is the first of two courses designed to develop the students' skills and knowledge in the area of In Vitro nuclear medicine. The focus of the course will be on laboratory skills, selected aspects of general chemistry, and selected aspects of biochemistry. Prerequisite: CHM 103.

NMT 258 2 2 0 3

Principles of In Vitro Nuclear Medicine II

This is the second course in a two-course series designed to develop the students' skills and knowledge in the area of In Vitro nuclear medicine. The primary focus of the course will be on the principles of competitive protein binding assays and the procedure for common assays. Prerequisite: NMT 251.

NMT 289 2 0 0 2

Radiobiology

This is a course in which the fundamentals of radiology, a system's sensitivity to radiation (normal and neoplastic), radiation pathology, and the biological effects of radiation are stressed. Emphasis is placed on the effects of radiation and the effects of radiation absorption on tissue and tissue recovery rate. Prerequisite: NMT 116.

NMT 290 2 0 0 2

Nuclear Medicine Technology Seminar

This course gives students an opportunity to review any aspects of nuclear technology in which they have special interest. Guest speakers will be invited to present papers on special topics. Prerequisites: NMT 201, NMT 202, NMT 203, and NMT 204.

NMT 292 2 0 0 2
Nuclear Medicine Technology Review
This course will be a comprehensive review of the nuclear medicine program. The primary focus will be on routine procedures and information vital to a nuclear medicine technologist. The culmination of the course will be a comprehensive exam. Prerequisites: NMT 111, NMT 116, NMT 117, NMT 213, NMT 221, NMT 231, NMT 235 NMT 245, NMT 251, and NMT 289.

NMT 300 0 0 15 5
Clinical Practice Review
During this course, the student will be assigned to six clinical rotations. The rotations will be chosen to strengthen demonstrated weaknesses of the student's previous clinical performance. Prerequisites: NMT 201, NMT 202, NMT 203, and NMT 204.

NUR 105 2 0 0 2
Introduction to Pharmacology
This is an introductory course designed to incorporate basic application of fundamental pharmacologic theory in administering medications. Content will include methods of medication administration, dosage calculation, legal responsibilities, classifications of pharmacologic agents, and an introduction to the application of the nursing process as it relates to pharmacology. This course will set the foundation for continuing pharmacological content. Prerequisites: none. Corequisites: NUR 111.

NUR 111 4 2 6 7
Foundations of Nursing Practice
Foundations of Nursing Practice presents nursing as the art and science of caring. The roles of the nurse are distinguished as a provider of care, as a manager of care, and as a member of a discipline. Basic nursing skills and the nursing process are introduced as the approach to client-centered care. Human needs, cultural needs, and human functioning are examined as a basis for assessment. Basic ethical and legal issues are introduced with relevance to the health care delivery system. Structured laboratory and clinical settings provide experiences for skill development and nursing care for clients with basic alterations in elimination, safety, mobility, comfort, and rest. Prerequisites: none. Corequisites: NUR 105.

NUR 121 4 0 12 8
Adult Health Nursing I
This course offers experience in using the nursing process to assist clients with basic alterations in human functioning. The teaching-learning process is introduced and applied to self-care maintenance of the healthy adult. Standards of care serve as guidelines to nursing care. Structured health care settings provide experiences with clients who have alterations in fluid-gas transport, activity, protective, and sensory-perceptual needs. Prerequisites: NUR 105. BIO 107 and NUR 111.

NUR 131 4 2 12 9
Adult Health Nursing II
This course builds upon concepts studied in NUR 111 and NUR 121. Learning is directed towards applying the nursing process with increased skill to promote health and provide care to clients. Emphasis is on basic alterations in health related to elimination, nutrition, fluid-gas transport and protective functions. Basic ethical-legal issues related to specific health conditions are also included. Laboratory and clinical settings provide experiences related to content. Prerequisites: NUR 121, BIO 108 and PSY 101.

NUR 141 5 0 12 9
Adult Health Nursing III
This course builds on Adult Health Nursing II and enhances the utilization of the nursing process in the delivery of care to clients with common multiple alterations in health care functioning. Emphasis is on nursing management of clients with fluid-gas, nutritional, sensory-perceptual and protective function needs. Principles related to the roles of the nurse are integrated into the course. Prerequisites: NUR 131 and BIO 169.

NUR 251 6 0 12 5
Mental Health Nursing
This course provides the opportunity to utilize the nursing process and the categories of human functioning when assisting the client experiencing common and multiple alterations in psychosocial adaptation. Emphasis is placed on development of the therapeutic interpersonal relationship. Structured and community-based health care settings will provide experience in meeting the psychosocial needs of clients across the life-span. Prerequisites: NUR 141, BIO 169, PSY 110 and PSY 111.

NUR 252 6 0 12 5
Nursing Care of the Older Adult
This course offers experience in applying the nursing process in meeting needs of the older adult. Characteristics of the normal aging process and their functional conse-

quences are identified and translated into implications for nursing care. Common pathological alterations, health promotion and health maintenance, rehabilitation, and palliative care are explored. Planned learning experiences are designed to provide contact with older adults in a variety of settings. Prerequisites: NUR 141, BIO 169 PSY 110 and PSY 111.

NUR 253 6 0 12 5
Perinatal Nursing
Perinatal nursing content provides the opportunity to acquire knowledge and skills essential in caring for the childbearing family. Theoretical concepts are integrated from the biopsychosocial sciences throughout the maternity cycle. Learning is directed towards application of the nursing process by focusing on the categories of human functioning in the care of low and high risk pregnant women and their families. Emphasis is placed on health promotion and maintenance in providing and managing care. Clinical agencies are used to provide experience in the application of theoretical concepts. Prerequisites: NUR 141, BIO 169, PSY 110 and PSY 111.

NUR 254 6 0 12 5
Nursing of Children
This course utilizes the nursing process and the categories of human functioning in meeting needs of children and families. Emphasis is placed on normal growth and development, common alterations in human functioning, and aspects of health promotion and maintenance. Learning opportunities will provide experiences throughout the health continuum. Prerequisites: NUR 141, BIO 169, PSY 110 and PSY 111.

NUR 271 6 0 15 11
Advanced Health Nursing
This course provides the opportunity to use the nursing process in the delivery of care to individuals with complex alterations in human functioning. The focus will include the individual and family within the hospital setting and the community. Community resources and agencies will serve as resources for planning client care in a variety of health care settings. Prerequisites: NUR 251, NUR 252, NUR 253 and NUR 254.

NUR 1011 7 2 6 10
Nursing I
This course is an introduction to nursing and to the practical nurse's role as a provider of holistic care to diverse clients throughout the lifespan. Classroom content focuses on the nursing process; legal, ethical, and professional issues; and functional health patterns and nursing skills that promote, maintain, and restore optimal levels of functioning. Laboratory and clinical experiences provide opportunities for the student to demonstrate beginning legal, ethical, professional, and caring behaviors as a member of the discipline of nursing. Clinical experiences will include acute care, long-term care, and community agencies. Corequisite: NUR 1012

NUR 1012 2 0 0 2
Pharmacology
This introductory classroom course prepares the student for safe administration of medications. Emphasis is placed on application of the nursing process to the basic concepts of pharmacological therapy. Instruction promotes proficiency in the use of ratio and proportion in conversion between household, apothecary, and metric systems of measurement and calculation of medication dosages. Prerequisite: Corequisite: NUR 1011

NUR 1021 8 2 12 13
Nursing II
This course focuses on the role of the practical nurse in using the nursing process to provide holistic care for diverse clients across the lifespan. Emphasis is placed on common alterations of the health perception-health maintenance, nutrition-metabolic, and self-perception/self-concept health patterns. Classroom, laboratory, and clinical experiences are based on the nursing process and provide the student with theory and application related to legal, ethical, professional, and caring behaviors as a member of the discipline of nursing. Clinical experiences will include acute care and long-term care settings. Prerequisites: NUR 1011, NUR 1012, BIO 107, PSY 101

NUR 1031 8 2 12 13
Nursing III
This course focuses on the role of the practical nurse in using the nursing process to provide holistic care across the lifespan for diverse clients related to the sexuality-reproductive pattern and common alterations in elimination, role-relationship, and sexuality-reproductive health patterns. Classroom, laboratory, and clinical experiences are based on the nursing process and provide opportunities for the student to demonstrate increasing independence in legal, ethical, professional, and caring behaviors as a

member of the discipline of nursing. Clinical experiences will include acute care, health clinics, and community agencies. Prerequisite: NUR 1021, BIO 108

NUR 1041 8 0 15 13
Nursing IV
This course focuses on the role of the practical nurse in using the nursing process to provide holistic care for diverse clients across the lifespan with common alterations of the activity-exercise, cognitive-perceptual, coping-stress tolerance, sleep-rest, and value-belief health patterns. Classroom and clinical experiences are based on the nursing process and include theory and application related to legal, ethical, professional, and caring behaviors; advanced accountability; collaboration and delegation as a member of the discipline of nursing. Clinical experiences will include acute care and long-term care settings. Prerequisite: NUR 1031

NUR 1042 1 0 0 1
Nursing Trends
This course will assist the student in making the role transistion from student to graduate. Students will explore various employment and educational opportunities for the entry-level nurse. Prerequisite: fourth quarter enrollment in Practical Nursing curriculum.

NUT 001 3 0 0 0
Basic Nutrition
This course is the study of basic nutrition with emphasis on functions and sources of nutrients needed for a balanced daily diet, including an overview of basic food elements, digestion, absorption, and metabolism. Prerequisite: none.

NUT 101 3 0 0 3
General Nutrition and Diet Therapy
This course introduces the basic principles of human nutrition and includes the major classes of nutrients and their utilization by the body. Factors affecting dietary habits, including fad diets, are presented. Nutritional requirements for various age groups are discussed. The applications and purpose of some common therapeutic diets and their relation to certain diseases are included in this course. Prerequisite: CHM 010 or high school chemistry.

ORI 101 3 0 0 3
Orientation
This course acquaints the student with the college and its resources and provides techniques for academic survival. Topics will include interpersonal skills, learning skills, campus resources, and college mechanics. Prerequisite: none.

PED 101 0 0 3 1
Fitness for Life
This course will be designed to explore and encourage positive health behavior through a program of good nutrition, stress management, and regular exercise. There will be a special focus on assessment of current fitness levels and the design of individual fitness programs. Prerequisite: none.

PED 102 0 0 3 1
Fitness and Recreation I
This is a general physical education course aimed at improving and maintaining physical fitness. Activities include individual and group exercise and sports. Prerequisite: none.

PED 103 0 0 3 1
Fitness and Recreation II
This is a general physical education course aimed at improving and maintaining physical fitness. Activities include individual and group exercise and sports. Prerequisite: none.

PED 157 0 2 0 1
Aerobics I
This course is an introductory course in aerobics. Its content emphasizes physical conditioning to improve cardiovascular fitness, strength and endurance, flexibility and knowledge of how to meet these goals. Prerequisite: none.

PED 158 0 2 0 1
Aerobics II
This is an intermediate course in aerobics, Its content continues to build on the instruction in physical conditioning covered in PED 157 to improve cardiovascular fitness, strength and endurance, flexibility and knowledge of how to meet these goals. Prerequisite: PED 157 or permission of the instructor.

PED 171 0 2 0 1
Nautilus I
This course provides an introduction to the strength training program using Nautilus equipment. Students will be given exercise prescriptions using various pieces of equipment. Prerequisite: None.

PED 172 0 2 0 1
Nautilus II
This course continues the workout techniques based on the strength training pro-

gram using Nautilus equipment and introduced in PED 171. Students will be given exercise prescriptions using various pieces of equipment. Prerequisite: PED 171 or permission of the instructor.

PED 208 0 2 0 1
Racquet Sports
This course offers instruction in a variety of racquet sports. Possible areas of concentration include tennis, badminton, and racquetball. Students will be given instruction in the fundamentals of basic skills and strategies as well as the rules of court etiquette and scoring. Instruction may take place off campus and a fee may be required. Prerequisite: none.

PED 211 0 2 0 1
Beginning Basketball
This course is an introduction to the sport of court basketball. Topics to be covered include conditioning and stretching, rules of the games, fundamental skills, individual roles in offense and defense, and team play. Prerequisite: none.

PED 212 0 2 0 1
Intermediate Basketball
This is an intermediate course in court basketball. It continues instruction in the topics covered in PED 211, and concentrates more on team play and full games. Prerequisite: PED 211 or permission of the instructor.

PED 224 0 2 0 1
Beginning Bowling
This course is an introduction to the sport of bowling. It is intended to develop bowling skills for the students and to form the basis for a carry-over skill in the sport. Upon completion, students should be able to demonstrate a basic mastery of this recreational sport for their physical, mental and emotional relaxation. Practice will take place off campus. A fee may be required. Prerequisite: none.

PED 225 0 2 0 1
Intermediate Bowling
This is an intermediate course in bowling. Its content emphasizes ball delivery, game rules, and lane etiquette, and prepares the student to play recreational bowling. Practice will take place off campus. A fee may be required. Prerequisite: PED 224 or permission of the instructor.

PED 271 0 2 0 1
Beginning Volleyball
This course is an introduction to volleyball. Course content emphasizes skill development in passing, setting, spiking, and serving power volleyball. Students will be prepared to play recreational volleyball. Prerequisite: none.

PED 272 0 2 0 1
Intermediate Volleyball
This is an intermediate course in volleyball. It continues development of the skills introduced in PED 271. Students will engage in tournament-level volleyball games and matches. Prerequisite: PED 271 or permission of the instructor.

PHI 101 5 0 0 5
Introduction to Philosophy
This is an introduction to general philosophy designed to familiarize the student with the main philosophical ideas of both Western and Eastern thought from ancient to modern times. Students are urged to examine major concepts and apply them to their own value systems. Prerequisite: none.

PHI 102 3 0 0 3
Introduction to Ethics
This course provides a practical introduction to the field of ethics. After students have gained a basic understanding of the primary principles involved, including relative and absolute values, judgement, obligation and conduct, the class will focus on applying these principles to selected topics of particular relevance to the discipline. Prerequisite: none.

PHY 001 3 2 0 0
Pretechnical Physics
This is a review of some of the basic concepts of physics. The topics included are systems of measurement, force and motion, and the properties of materials. Emphasis is placed on laboratory procedures and graphical analysis. Prerequisite: none.

PHY 100 3 0 0 3
Introduction to Physics
This course is an introduction to the problems and concepts of physics. The major areas covered are fundamental units and systems of measurements, motion, forces, momentum, work, energy, and power. Quantitative problems involve the use of elementary algebra and trigonometry. Prerequisite: none.

PHY 101 3 0 0 3
Concepts in Physics
This course examines the concepts and problems of physics in the areas of measurement, motion, forces, energy, tempera-

ture and heat, fluids and gases. Quantitative problems involve the use of elementary algebra. Corequisite: RTH 109.

PHY 102 3 0 0 3
Electricity and Electronics
This is a study of electricity and electronics including the concepts of electric and magnetic fields, electric potential, electric circuits, and solid-state devices. Emphasis is on medical applications of electricity and electronics. Quantitative problems involve the use of elementary algebra and trigonometry. Prerequisites: MAT 113 and PHY 101 or PHY 100.

PHY 103 4 0 0 4
Introduction to Sound and Light
This course is an introduction to the principles of sound and light. Areas covered are fundamental units and systems of measurements, concepts of work, energy and power, wave phenomenon, sound, and light. Quantitative problems involve the use of elementary algebra and trigonometry. Major emphasis will be directed toward medical applications for allied health students. Prerequisite: MAT 115 or Equivalent.

PHY 111 3 2 0 4
Physics - Mechanics
This is a fundamental course which develops the concepts of force, motion, work, energy, and power. Also included are the topics of vector analysis, rotational motion, and basic machines. Corequisite: MAT 102.

PHY 112 3 2 0 4
Physics - Materials and Heat
This is a course which examines the properties of solids, liquids at rest and in motion, gas laws and their application, heat and thermodynamics. Emphasis is on practical application through the use of realistic problems and laboratory exercises. Prerequisite: PHY 111.

PHY 113 3 2 0 4
Physics - Electricity
This is a study of the basic principles of electricity, including electron theory, direct current circuits, alternating current circuits, electromagnetic interactions, and batteries. Emphasis is on practical application through the study of electrical power generation, transmission, and conversion devices. Prerequisite: PHY 111.

PHY 114 3 2 0 4
Physics - Light and Sound
This is a study of wave motion and the generation, transmission, and detection of sound and light. Topics include acoustics, illumination, optical devices, and lasers. Practical application is emphasized through exercises and acoustical analysis of buildings and lighting system design and layout. Prerequisite: PHY 111.

PHY 150 4 2 0 5
Introduction to Astronomy
This study includes observation of the day and night sky by use of binoculars, telescopes, and other simple instruments; learning to observe and measure properties of astronomical objects; and learning basic concepts of the solar system, stellar evolution, and cosmology. No science or math background will be required beyond the general requirements for the College Transfer curriculum. Prerequisite: admission to College Transfer curriculum.

PHY 201 4 2 0 5
College Physics I - Mechanics
This is the first in a sequence of algebra and trigonometry-based general physics courses. It includes the topics of measurement, one-and two-dimensional motion, dynamics, statics, centripetal force, universal gravitation, work and energy, impulse and momentum, rotation of rigid bodies and fluids. Prerequisites: MAT 123 and MAT 124 or equivalent.

PHY 202 4 2 0 5
College Physics III - Heat Thermodynamics and Electricity
This course is a continuation of PHY 201 which includes the topics of simple harmonic motion, temperature and the ideal gas law, heat and thermodynamics, electrostatics and direct current electricity. Prerequisite: PHY 201.

PHY 203 4 2 0 5
College Physics III - Alternating Current, Light and Modern Physics
This is the third and last in a sequence of algebra and trigonometry-based general physics courses. It includes the topics of electromagnetism, AC circuits, light and modern physics. Prerequisite: PHY 202.

PHY 211 4 2 0 5
General Physics I with Calculus
This course is the first in a three-quarter sequence of calculus-based physics. Topics covered include linear and rotational kinematics and dynamics of particles, Newton's laws, work, energy, power, momentum and two-dimensional rigid

body mechanics. Experimental verification of principles studied will form the basis of accompanying laboratory work. Prerequisite: MAT 125.

PHY 212 4 2 0 5
General Physics II with Calculus
This course is the second of the calculus-based physics sequence. Topics covered include properties of fluids and solids, wave motion and sound, temperature, heat, and thermodynamics. Verification of principles studied will form the basis of accompanying laboratory work. Prerequisite: PHY 211.

PHY 213 4 2 0 5
General Physics III with Calculus
This course is the third and final one in the sequence of calculus-based physics. Topics covered include magnetism and electromagnetism, alternating current, electromagnetic waves, geometrical optics, wave optics and atomic physics. Experimental verification of principles studied will form the basis of accompanying laboratory work. Prerequisite: PHY 212.

PHY 1101 3 2 0 4
Applied Science I
This course presents an introduction to some physical principles and their application in industry. Topics included are measurements in the English and metric system, properties of solids and liquids, work and simple machines, and basic electrical principles. A major emphasis is on basic electrical concepts and the operation of electrical devices. Practical application stressed by use of realistic problems and laboratory exercises. Prerequisite: none.

PHY 1102 3 2 0 4
Applied Science II
This course is a study of the concepts of force, motion, work, energy, power, and heat. Practical applications are realized through the study of friction and simple machines and the relationship between thermal and mechanical energy. Prerequisite: none.

PHY 1103 3 2 0 4
Fundamentals of Electricity
This course is a study of elementary principles of electricity, including the structure of matter and electron theory, basic electrical units, and the relationship of current, voltage, resistance, and power in series, parallel, and combination circuits. Prerequisite: none.

PHY 1104 3 2 0 4
Applied Science IV
This course is a study of wave motion and sound and light. Practical applications are stressed through the study of acoustics, musical sounds, color mixing, optical devices, illumination, and the laser. Prerequisite: none.

PHY 1114 3 2 0 4
Science for Printers
This course is designed to acquaint the student with some of the facts and principles concerning the properties and structure of matter. Major topics considered will be the general and specific properties of matter, atomic theory, physical and chemical changes, theories of light, photometry, mirrors and lenses, reflection, refraction, and color. Prerequisite: PRN 1150.

PLU 1131 8 0 15 13
Plumbing I
This course is an introduction to the plumbing trade. It includes plumbing systems, use and care of hand tools, and selection of plumbing materials. The student will learn to solder copper pipe, cement plastic pipe, and connect other plumbing joints. Plumbing layouts and the study of the North Carolina Plumbing Code will also be introduced. Prerequisite: none.

PLU 1132 3 0 15 8
Plumbing II
This course is a continuation of PLU 1131, Plumbing I. The student will practice "roughing-in" houses, which includes measuring for and cutting holes in stud walls; figuring proper slope in pipe; and locating stacks, stack vents, toilets, and drains. The student will also learn to determine the size of water and waste pipes and how to install them. The study of plumbing layouts and the North Carolina Plumbing Code will be continued. Prerequisite: PLU 1131.

PLU 1133 5 0 18 11
Plumbing III
This course is a continuation of PLU 1132, Plumbing II. General plumbing practice will be continued. However, in this quarter the student will assist in the selection and installation of all types of fixtures as well as the selection, installation, and servicing of water heaters. The study of plumbing layouts and the North Carolina Plumbing Code will be continued. Prerequisite: PLU 1132.

PLU 1134 3 0 21 10
Plumbing IV
This course is a continuation of PLU 1133, Plumbing III. The installation of plumbing will be continued. Additionally, the topics of plumbing repairs, troubleshooting, and unclogging drains will be covered. The study of layouts and plumbing codes will be concluded. Prerequisite: PLU 1133.

POL 102 5 0 0 5
National Government
This course is a study of English and Colonial background, the Articles of Confederation and the framing of the federal Constitution; the nature of the federal union, states' rights, federal powers, and political parties; and the general organization and functioning of the national government. Prerequisite: none.

POL 103 5 0 0 5
State and Local Government
This course is a study of American state and local governments, including interrelationships of national, state and local levels; powers of executive, legislative and judicial branches; selection of officials; and budgeting. Special attention is given to North Carolina and Winston-Salem. Prerequisite: none.

PRN 1131 6 0 12 10
Introduction to Printing
This course is an introduction to the printing trade. Instruction will include student orientation, a historical outline of graphic arts, familiarization of terms, equipment, and tools used in printing, and demonstrations of the equipment used in graphic arts. The student will be required to produce a printing project. Safe practices and safety rules are stressed. Prerequisite: none.

PRN 1132 4 0 12 8
Offset Printing I
This course is an introduction to offset printing. The operation of short-coupled, integrated dampening duplicators and long-coupled, register table duplicators will be covered. The student will be required to operate each of these pieces of equipment. Prerequisites: PRN 1150 and PRN 1131.

PRN 1133 6 0 15 11
Offset Printing II
A continuation of PRN 1132, Offset Printing I, this course will place emphasis on the use and maintenance of the larger press. Students will be introduced to the production of two-color, three-color, and four-color printing. This course is also an advanced study of the process camera and related darkroom equipment. Prerequisites: PHY 1114, PRN 1132, and PRN 1134.

PRN 1134 3 0 6 5
Composition I
The students will be instructed in the methods of copy preparation and the use of equipment in that phase of graphic arts. Desktop publishing will be introduced in a new computer format. After the students learn how to prepare the copy, they will be required to produce one or more jobs. Prerequisites: PRN 1150, EDP 1101, and PRN 1131.

PRN 1135 3 0 3 4
Composition II
This course is a continuation of PRN 1134, Composition I. The major part of this course will be devoted to cold type and art composition by the digitized method. Machines covered will include the computer, laser printer, and headliner. Prerequisites: PHY 1114, PRN 1132, and PRN 1134.

PRN 1136 5 0 0 5
Estimating
This course covers fundamentals of estimating costs of printing. Included in the instruction are the role of the estimator, basic cost areas, paper and layouts, preparatory composition, the press, finishing, estimate forms, estimating practice, and use of the Franklin Catalog. Prerequisites: PRN 1133 and PRN 1135.

PRN 1137 0 0 21 7
Printing Project
The printing project will be determined after a conference between the instructor and student. The project will be in an area in which the student has had the fundamentals. Prerequisites: PRN 1133 and PRN 1135.

PRN 1150 5 0 0 5
Printer's Mathematics
This course deals with printer's point system as it applies to type spaces, furniture, and other spacing materials, as well as problems in spacing outlines and centering heads. Instruction and practice will be given in reading a micrometer. Problems in cutting paper economically, in figuring the amount, and in measuring the thickness of papers and offset plates will be used. Prerequisite: none.

PSM 100 3 0 0 3
Postal Service History and Organization
This course is designed to trace the delivery of written communication and merchandise from earlier eras to the present. It compares the private, corporate, and governmental agencies which have been responsible for mail service throughout the world, but particularly in the United States. The current postal organization as mandated by public law 91-37B is studied. Postal philosophies, policies, procedures, rules and regulations are also studied and traced to the current organization. Prerequisite: none.

PSM 101 5 0 0 5
Postal Service Labor Management
The course presents an overview of laws and practices as related to labor management in the Postal Service. It starts with the development of labor unions in the federal government and reviews the current status, problems, and/or issues in the Postal Service. Emphasis is placed on the National and Local Agreements, the various bargaining units and associations in the U. S. Postal Service, grievance procedures, disciplinary action procedures, and the National Labor Relations Board. Prerequisite: none.

PSY 101 3 0 0 3
Psychology
This course is geared to study the principles of human behavior with reference to thinking, learning, memory, perception, emotional life, individual differences in intelligence, aptitude, personality, the scientific nature of psychological investigations, and research findings related to daily life. Prerequisite: none.

PSY 102 5 0 0 5
General Psychology
This course is a study of the various fields of psychology: the developmental process, motivation, emotion, frustration and adjustment, mental health, attention and perception, and problems of group living. Attention is given to applications of these topics to problems of study, self-understanding, and adjustment to demands of society. Prerequisite: meet the required reading score on placement test to enter curriculum or permission of the department chairperson.

PSY 108 5 0 0 5
Abnormal Psychology
This course offers an introduction to behavior pathology. The etiology, diagnosis, and prognosis of abnormal behavior, neurosis, psychosis, character disorders, and psychosomatic reactions are among the topics included in the study. Prerequisite: PSY 101 or PSY 102.

PSY 110 3 0 0 3
Lifespan Psychology
This course will deal with the human life span from conception through old age. It is intended to give the student a thorough grounding in the basic principles of developmental psychology. Emphasis will be placed on the theories of Ericson, Piaget and Havighurst. Physiological and psychological critical periods in the development of the individual will be identified and their implications explored. Special attention will be given to the stress periods of childhood, adolescence, middle age, and old age. Prerequisite: PSY 101 or permission of the instructor.

PSY 111 3 0 0 3
Abnormal Behavior
This course offers an introduction to behavior pathology. Students will be given a basic grounding in the etiology, diagnosis, and prognosis of various kinds of abnormal behavior. Topics in the study will include neurosis, psychosis, addiction, suicide, character disorders, psychosomatic reactions, childhood disorders, and geriatric disabilities. Prerequisite: PSY 101 or PSY 102.

PSY 112 3 0 0 3
Personality Development
This course is designed to help the student recognize the importance of the physical, intellectual, social, and emotional dimensions of personality. Grooming and methods of personality development are emphasized. Prerequisite: none.

PSY 115 3 0 0 3
The Psychology of Helping Relationships
This course is designed to help the student develop an awareness of attending skills including perception, self-concept, interpersonal communication and an understanding of the importance of these skills and their use in providing support and comfort in human relationships. Prerequisite: enrollment in health curriculum or permission of department chairperson.

PSY 116 1 0 0 1
Stress Management
This course is designed to assist students in understanding the effect stress can have on their psychological and physical well-

being. Students will be assisted in identifying their personal sources of stress and assessing their current coping strategies. Students will be taught how to successfully manage stress through using a variety of proven stress-management techniques. Prerequisite: none.

PSY 117 1 0 0 1
Death and Grief
This course will examine American cultural responses to death, developmental understandings of death, and students' personal experiences with death. Students will explore personal and cultural reactions to various kinds of death experiences including catastrophic and mass deaths, suicide, homicide, and euthanasia. The experience of grief will be covered, and students will be taught appropriate responses to people who are dying and grieving. Special attention will be given to the role of the health care professional as it relates to death and grief. Prerequisite: none.

PSY 205 3 0 0 3
Child Psychology
The objective of this course is to consider the significant phases of motor, cognitive, emotional, and social development of the child as these are influenced by genetic, cultural, and individual elements from the prenatal period to adolescence. Prerequisite: PSY 101 or PSY 102.

PSY 254F 5 0 0 5
Grief Psychology
This course presents the role of the funeral director in grief counseling. Emphasis is placed on making the funeral director more aware of the psychological needs the impact of death creates in the bereaved. Upon completion, students will be able to apply the concepts of death, dying, immortality, grief, bereavement, religion, and the funeral in a funeral services vocation. Prerequisite: PSY 101.

PSY 1101 3 0 0 3
Human Relations
This course is a development of understanding of relationships to other persons through some of the basic principles of human psychology. Study of the problems of the individual and the work situation in relation to society, group membership, and relationships within the work situation are included. Prerequisite: none.

RAD 201 2 0 0 2
CT Physics and Instrumentation
This course provides a foundation for student understanding of the physical principles essential to computerized tomography. Functions and technologist operation of the gantry, console, hardcopy recording equipment and computer software are explored. The keyboarding commands specific to various equipment manufacturers will be reviewed. Prerequisite: enrollment in Computerized Tomography Certificate curriculum.

RAD 202 2 0 0 2
MRI Physics and Instrumentation
The physical basis for magnetic resonance imaging is explored to include MR signals, spectroscopy, and MRI parameters. Topics for discussion also include imaging hardware design and operation of the gantry, console, image recording equipment and system software. Variations in manufacturer design will be reviewed. Prerequisite: enrollment in MRI Certificate curriculum.

RAD 204 3 0 0 3
CT Procedures
Body section anatomy as evidenced through CT imaging will be discussed in depth. Imaging protocols for routine and special studies are outlined to include contrast media enhancement. Venopuncture techniques are practiced. Prerequisite: enrollment in Computerized Tomography Certificate curriculum.

RAD 214 0 0 24 8
Introduction to CT Imaging
The student will gain experience in computerized tomography imaging in the clinical setting. Emphasis for study will include gantry and console equipment operation, patient positioning and care, administration of contrast media, hardcopy recording and protocol selection. Prerequisite: enrollment in Computerized Tomography Certificate curriculum.

RAD 215 3 0 27 12
Introduction to MR Imaging
Clinical experience will introduce the student to gantry and console operation. Imaging recording, contrast media administration, and scanning protocol are practiced. MR body section anatomy will be demonstrated. Other discussions include selection of surface coils and reduction of patient and personnel safety risks. Prerequisite: enrollment in MRI Certificate curriculum.

RAD 225 2 0 30 12
MRI Practicum
The student moves toward independent clinical practice in imaging and patient care techniques. Didactic instruction emphasizes improvement of image technical quality, limitation of artifact and resolution of technologist-controllable technical problems. Case studies point out protocol selection and pathology demonstration in the modality. Prerequisite: RAD 215.

RAD 228 3 0 27 12
Clinical Internships
The second practicum course will progress the student toward independent clinical practice. Refinement of equipment skills, patient positioning skills, and contrast administration skills are stressed. This clinical internship emphasizes identification of image artifacts and image quality improvement. Case studies are used to identify image quality and to assist the student in recognizing pathologies on scans. Prerequisite: RAD 201 and RAD 214.

RAD 231 3 0 0 3
Patient Care and Monitoring
The student will be introduced to the special support care and monitoring needed by the patient in radiographic special procedures. Informed consent, patient education, charting, and reaction to contrast media introduction are emphasized. Maintenance of sterile fields is discussed. Prerequisite: enrollment in Imaging Technology curriculum.

RAD 235 3 0 0 3
Equipment Instrumentation
The use and operation of catheters, guidewires and needles are examined. Correct utilization and preventive maintenance of film magazines, rapid film changers, cine equipment, radiographic tubes, tables, consoles and electromechanical injectors are outlined. Prerequisite: enrollment in Imaging Technology curriculum.

RAD 236 2 0 0 2
Radiographic Pharmacology
Medications and contrast medias utilized in special radiographic imaging are studied as to indications, administration and adverse reactions. The technologist's role in assisting in drug administration as well as patient monitoring is explored. Prerequisite: enrollment in Imaging Technology curriculum.

RAD 239 0 2 21 8
Clinical Experience I
The first in a series of four clinical courses, this course introduces the student to the role of the special imaging technologist. Equipment operation is stressed as is the needed physical and psychological patient support. Lab exercises include the mechanics of sterile fields and radiographic accessories. Corequisite: RAD 231.

RAD 240 4 0 0 4
General Vascular Imaging
The anatomy and procedural aspects of performing vascular interventional studies of the head, trunk and extremities are examined. Patient preparation, imaging techniques and equipment selection are outlined for student understanding. Prerequisites: RAD 231, RAD 235.

RAD 249 0 0 21 7
Clinical Experience II
Students gain additional experience in vascular studies of the head, trunk and extremities and cardiovascular system. Emphasis is placed on selection of equipment, patient positioning and imaging techniques for optimum visualization. Prerequisite: RAD 239.

RAD 253 4 0 0 4
Cardiovascular Imaging
The radiographic examinations for anatomical and dynamic demonstration of the cardiovascular system are discussed. The technologist's role in performing diagnostic procedures for physiologic monitoring is studied. Cardiovascular anatomy and physiology are stressed. Prerequisites: RAD 231, RAD 235.

RAD 255 2 0 0 2
Image Evaluation I
Evaluation of angiographic studies of the head, trunk and extremities is undertaken. The student will present selected studies and assess image quality, radiographic anatomy and patient pathology as demonstrated on the exam. Prerequisites: RAD 240, RAD 249.

RAD 259 0 0 24 8
Clinical Experience III
The student progresses to more independent practice in vascular and cardiovascular procedures. Assisting the physician and patient assessment become key elements for student growth in clinical practice. Prerequisite: RAD 249.

RAD 260 3 0 0 3
Quality Assurance
Components of a complete quality assurance program for the vascular/cardiovascular interventional department are investigated. The student will select a research project in departmental operations or trends in clinical practice for presentation. Prerequisite: RAD 259.

RAD 262 2 0 0 2
Image Evaluation II
Evaluation of cardiovascular angiography exams is the focus of this course. Through student presentation, selected exams are viewed for their diagnostic and technical adequacy. Identification of cardiovascular anatomy and pathology is stressed. Prerequisite: RAD 253.

RAD 269 0 0 30 10
Clinical Experience IV
Clinical experience provides the student with the skills needed for independent practice and entry into the workplace. Prerequisite: RAD 259.

RDT 112 2 2 0 3
Introduction to Patient Care Techniques
Considerations for study include the patient care responsibilities of the radiographer, principles of body mechanics and effective patient-technologist communication. Radiographer reaction to acute patient care situations is also discussed. Prerequisite: none.

RDT 113 2 2 0 3
Departmental Orientation and Medical Ethics and Law
Students will be introduced to the operational aspects of the radiology department through both classroom and clinical experience. Emphasis for study will include an introduction to radiographic positioning, insights into medical ethics and law, and equipment manipulation. Prerequisite: none.

RDT 114 2 2 0 3
Basic Essentials of Radiologic Technology
The student is introduced to the basic essentials of radiologic technology. Included is a preliminary overview of radiographic and fluoroscopic equipment and the principles of automatic processing. Basic technical factors and radiographic accessories are discussed with emphasis placed on their effect on equipment utilization and operation. Prerequisites: RDT 112 and RDT 113. Corequisite: RDT 128.

RDT 120 4 0 0 4
Radiation Physics
The basic principles behind atomic theory, magnetism, electricity, radioactivity and x-ray circuitry as related to the radiologic sciences are presented. Prerequisite: RDT 114.

RDT 128 0 2 9 4
Practicum I
Clinical and energized lab experience is utilized with special emphasis on positioning, technique and accessories used in radiography of the chest, abdomen and extremities. Prerequisite: RDT 112 and RDT 113. Corequisite: RDT 114.

RDT 130 3 0 0 3
Radiation Biology and Protection
The effects of radiation on the individual cell, organ systems, and the body as a whole are explored. Protective regulations, monitoring devices and reporting procedures for radiation exposure to patient and worker are presented. The effects of radiation and their link to medical use of radiation protection measures are stressed. Prerequisite: RDT 120.

RDT 137 3 2 0 4
Radiographic Technique I
This course introduces the student to the basic concepts of radiographic production. Laboratory experiences provide the student with opportunities to test the principles of radiographic exposure and usage of accessory equipment. Prerequisite: RDT 114.

RDT 138 0 2 9 4
Practicum II
Clinical and energized lab experience is utilized with special emphasis on positioning, technique and accessories used in radiography of the entire vertebral column and routine skulls. Prerequisite: RDT 114 and RDT 128.

RDT 139 3 0 0 3
Positioning and Related Anatomy I
This course will deal with radiographic positioning of the upper and lower extremity, shoulder and pelvic girdles, and bony thorax. Special emphasis is placed upon the osseous radiographic anatomy of the particular structure. Prerequisites: BIO 107, BIO 115, and BIO 116.

RDT 148 0 2 15 6
Practicum III
Clinical and energized laboratory experience is utilized with special emphasis placed on positioning, technique and accessories needed in radiography of the gastrointestinal system, biliary system, urinary system and mammography. Prerequisite: RDT 138.

RDT 149 3 0 0 3
Positioning and Related Anatomy II
This course includes radiographic positioning of the entire vertebral column and routine skulls. Prerequisite: RDT 139.

RDT 237 2 2 0 3
Radiographic Technique II
An in-depth study is presented in the selection of exposure factors and the proper use of grids, cones, and other devices which may be employed to produce high quality radiographs. Prerequisite: RDT 137.

RDT 240 2 0 0 2
Digital Imaging
This course is designed to address the current trends in radiographic equipment to acquire and store data electronically. Current advancements in technology in the field are identified and discussed. Prerequisite: RDT 237.

RDT 248 0 2 15 6
Practicum IV
Clinical and energized laboratory experience concentrates on positioning, technique and accessories used in radiography of pediatric, trauma and surgical patients. Prerequisite: RDT 148.

RDT 250 3 0 0 3
Special Procedures
This course provides in-depth study into radiographic procedures requiring special imaging or approach techniques to areas previously difficult to visualize. Imaging procedures requiring different modalities are emphasized. Prerequisite: BIO 108.

RDT 254 3 0 0 3
Departmental Administration and Quality Assurance
This course analyzes the operational aspects of a radiology department to include finances, employee supervision, scheduling and other special problems. Organization and implementation of a departmental quality control program are discussed. Prerequisite: enrollment in seventh quarter Radiologic Technology curriculum.

RDT 258 0 2 21 8
Practicum V
Radiographic positioning of the cranium as a whole and paranasal sinuses is stressed through clinical and laboratory experience. Emphasis is placed on technique and accessory equipment selection. Prerequisite: RDT 248.

RDT 261 2 0 0 2
Pediatric, Emergency and Operative Radiography
Procedures utilized in radiography of pediatric, operative and emergency radiographic examinations are examined. Discussion of positioning, technical factor selection and special care needed during these exams is pursued. Prerequisite: RDT 137.

RDT 268 0 2 21 8
Practicum VI
Clinical and energized laboratory experiences will cover special views of the bony anatomy and emphasize positioning skills and radiographic technique selection. Prerequisite: RDT 258.

RDT 269 3 0 0 3
Positioning and Related Anatomy III
This course investigates anatomy and radiographic positioning of the gastrointestinal, biliary and urinary systems. Applications for radiographic equipment and accessories are presented. Prerequisite: RDT 149.

RDT 278 0 2 15 6
Practicum VII
Clinical and energized laboratory experience stresses refinement of positioning and technique skills in special and routine radiographic studies. Prerequisite: RDT 268.

RDT 279 3 0 0 3
Positioning and Related Anatomy IV
The basics of bony skull anatomy, positioning of the cranium and application for equipment/accessories needed for cranial radiography are studied. Specialized filming techniques of the paranasal sinuses, facial bones, centers of hearing and mandible are included. Prerequisite: RDT 269.

RDT 289 3 0 0 3
Film Critique I
The first of two film critique courses, this course introduces the basics of film quality analysis and radiographic pathology. Radiographs of the chest, abdomen, extremities, spine and skull are evaluated. Prerequisites: RDT 138 and RDT 139.

RDT 290 3 0 0 3
Film Critique II
Study emphasizes quality analysis of radiographs of GI tract, GU tract, biliary, mammography, skull and special studies. Prerequisite: RDT 289

RDT 301 1 0 0 1
Current Issues in Radiology Management
Changes and innovations in staffing methods, imaging techniques, effective management by goal setting and objectives, and governmental radiation regulations will be presented for discussion. Legal aspects of technology and the growing accountability of the technologist will be considered. Emphasis will be placed on the application and long-term results of implementation of current trends in departmental operations. Prerequisite: enrollment in seventh quarter RDT curriculum or graduate of an AMA approved RDT program or permission of the RDT department chairperson.

RDT 302 1 0 0 1
Effective Communication: Technologist, Patient and the Health Team
The role of the technologist in the health team will be examined. Communication skills necessary for effective communication, both oral and written, will be identified. Communication mechanisms needed for the exceptional patient will be explored through role play and discussion. Prerequisite: enrollment in seventh quarter RDT curriculum or graduate of an AMA approved RDT program or permission of the RDT department chairperson.

RDT 303 1 0 0 1
Technologist Motivation in the Radiology Setting
The various ideologies of motivation will be discussed. Effective motivators for technologists possible in the clinical setting will be identified. Also to be considered is the use of an employee appraisal system as a motivator for technologist behavior. Prerequisite: enrollment in seventh quarter RDT curriculum or graduate of an AMA approved RDT program or permission of the RDT department chairperson.

RDT 304 1 0 0 1
Preparation for the National Radiologic Technology Boards
The content specifications for the national examination in Radiography are the basis for this overview study of varied test topics. Test-taking skills are applied in sample test items to improve the test taker's performance. Prerequisite: enrollment in seventh quarter RDT curriculum or graduate of an AMA approved RDT program or permission of the RDT department chairperson.

REA 100 3 0 0 3
Introduction to Real Estate Appraisal (R-1)
This course introduces the student to the subject of real estate appraisal and prepares the student for the R-2 course on "Valuation Principles and Procedures." It begins with coverage of basic real property law, followed by coverage of the various concepts of value and the operation of real estate markets. Relevant mathematical concepts are then reviewed and the student is introduced to statistical concepts used in appraisal practice. Next comes coverage of real estate financing terminology and practices, followed by an introduction to the basics of residential construction and design. The student is then provided an overview of the entire valuation (appraisal) process, and the course concludes with specific coverage of residential neighborhood analysis and property analysis, two of the most important preliminary steps in the appraisal process. Prerequisite: none.

REA 101 3 0 0 3
Valuation Principles and Procedures (R-2)
This course focuses on the procedures (methodology) used to develop an estimate of property value and how the various principles of value relate to the application of such procedures. Emphasis is on appraisal of residential 1-4 unit properties and small farms; however, all the concepts and procedures covered are applicable to the appraisal of all types of properties. The course begins with a review of the appraisal process and proceeds into thorough coverage of the sales comparison approach, followed by site valuation methods used to appraise residential 1-4 unit properties. The cost approach is then covered in depth. The basic concepts and methodology associated with the income approach are covered, with emphasis on direct capitalization using an overall rate and the gross rent multiplier technique. Finally, the student is introduced to the process of reconciling property value estimates obtained through application of the approaches to value. Prerequisite: REA 100.

REA 102 3 0 0 3
Applied Residential Property Valuation (R-3)
This course covers laws, rules, and stan-

dards which must be followed by appraisers and focuses on the application of principles and procedures to the appraisal of residential 1-4 unit properties and small farms. The student is first acquainted with federal laws/regulations applicable to appraisers and the provisions of the North Carolina Real Estate Appraisers Act and related Commission Rules. Next comes coverage of the Uniform Standards of Professional Appraisal Practice (which are part of the Commission's Rules), followed by coverage of appraisal reports, with emphasis on standard report forms. The student then participates in a comprehensive case study of an appraisal of a single-family house using the URAR form. Instruction is then provided on various special considerations in appraising other types of residential 1-4 unit properties and in appraising farms. Finally, the student is introduced to appraising special (partial) property interests and to condemnation appraisals. Prerequisites: REA 100 and REA 101.

REA 200 3 0 0 3
Introduction to Income Property Appraisal (G-1)
This course introduces concepts and techniques used to appraise real estate income properties. It begins with a discussion of underlying economic principles and motivations for investing in income property. The appraisal process is then reviewed with emphasis on income property. This is followed by a discussion of real estate market analysis, property analysis, and site valuation. Mathematical and statistical concepts used in the appraisal of income property are covered next followed by coverage of how to use financial tables and/or financial calculators to solve a variety of problems associated with analysis of real estate income properties, including present value, loan calculations, estimation of net operating income, and estimation of before-tax cash flow. Next, students learn how to estimate the value of a real estate income property by using a gross income multiplier and by direct capitalization with an overall rate. Finally, students are introduced to other capitalization rates. Prerequisites: REA 100, REA 101, and REA 102.

REA 201 3 0 0 3
Advanced Income Capitalization Procedures (G-2)
This course reviews and then expands on the concepts introduced in Course G-1. The direct capitalization techniques introduced in G-1 are expanded to include various band of investment and residual techniques used in income property appraisal. This is followed by a thorough discussion of the concepts of yield rates and of discounted cash flow analysis (yield capitalization), which is the primary focus of this course. Financial leverage is also discussed so students better understand the relationship between various yield rates and capitalization rates. Several traditional yield capitalization formulas including Inwood, Hoskold, Ellwood and Akerson, are then discussed. Although rendered obsolete by the advent of financial calculators, these formulas are still used by many appraisers and students should be familiar with them. A financial calculator is required for this course. Prerequisite: REA 200.

REA 202 3 0 0 3
Applied Income Property Valuation (G-3)
This course covers laws, rules, and standards which must be followed by appraisers and focuses on the application of principles and practices to the appraisal of income properties. The course begins with a review of federal laws/regulations applicable to appraisers, followed by coverage of the North Carolina Real Estate Appraisers Act and related Commission Rules, and coverage of the Uniform Standards of Professional Appraisal Practice (which are part of the Commission's Rules). Preparation of narrative appraisal reports is then covered, with students also being introduced to the Uniform Commercial and Industrial Appraisal Report (UCIAR) form. Coverage then shifts to appraising leased income properties, with emphasis on the effect of various lease provisions on the value estimate. The student then participates in highest and best use case studies, followed by case studies of appraisals of various types of existing income properties, which is the major focus of the course. The course concludes by covering considerations in appraising various development projects. Prerequisites: REA 200 and REA 201.

RTH 109 0 6 0 3
Respiratory Care I
This course will provide the student with a general orientation to the hospital setting and the respiratory care profession. The student will learn the following basic patient care procedures and skills: patient monitoring, infection control, patient positioning, body mechanics, medical-legal aspects and patient charting. Prerequisite: none.

RTH 111 0 2 6 3
Clinical Experience I
An introductory first clinical course in which the student will be oriented to the hospital and respiratory care environments. The student will use the pre-clinical laboratory for learning and practicing basic patient and respiratory care procedures prior to actual clinical performance. Emphasis will be placed on support of subject matter covered in RTH 119. Prerequisites: BUS 141 and RTH 119. Corequisite: RTH 119.

RTH 112 0 2 12 5
Clinical Experience II
The student will continue to rotate in the general care areas of the hospital(s) and practice the following basic respiratory care procedures: Oxygen and humidity/aerosol therapy, lung inflation techniques, chest physical therapy techniques, respiratory secretion removal and collection techniques, administration of airway pharmacologic agents, and airway management techniques. Students will also rotate through hospital decontamination areas and the respiratory care biomedical section. The pre-clinical laboratory will be utilized to practice advanced patient assessment techniques and to support subject matter covered in RTH 129 prior to clinical performance. Prerequisites: RTH 111 and RTH 119. Corequisite: RTH 129.

RTH 113 0 2 12 5
Clinical Experience III
This course will provide the student clinical rotations involving procedures from previous and parallel RTH courses. Introduction to emergency and critical respiratory care, ECG department, blood gas laboratory, cardiac catheterization lab, anesthesia/surgery observation and clinical microbiology lab experiences will also be conducted. Students will utilize the pre-clinical laboratory for the practice of related procedures. Prerequisites: RTH 159, RTH 150 and BIO 169. Corequisites: RTH 160 and 170.

RTH 119 2 2 0 3
Respiratory Care II
This course will enhance the student's knowledge of physical and chemical properties of gases and gas physics. Emphasis will be placed on theory of operation and technical aspects of basic respiratory care equipment. Laboratory hours will be used to support use of equipment and concepts learned in this course. Chest physical therapy, including postural drainage percussion, vibration and related techniques will be addressed. Prerequisite: RTH 109, PHY 101, and MAT 113.

RTH 129 2 2 0 3
Respiratory Care III
This course will focus on airway management, aids to lung inflation, manual resuscitators, oxygen analyzers, equipment decontamination and bedside monitoring equipment and techniques. Prerequisite: RTH 119.

RTH 149 2 0 0 2
Cardiopulmonary Anatomy and Physiology: Essentials for Respiratory Care I
This is the first of a series of two courses designed to provide a concentrated study of cardiopulmonary anatomy and physiology essential to the practice of respiratory care. Ventilation, basic pulmonary function measurements, diffusion of pulmonary gases, the respiratory and circulatory systems as well as an introduction to hemodynamic measurements will be covered. Prerequisites: PHY 101 and BIO 107.

RTH 150 3 0 0 3
Pharmacology
This course, through lectures and demonstrations, will provide the student with a working knowledge of pharmacological effects, side effects, contraindications, and use of the major classes of drugs. Special emphasis will be placed upon those drugs affecting the respiratory system and the autonomic nervous system. Prerequisites: BIO 108 and MAT 114.

RTH 159 3 0 0 3
Cardiopulmonary Anatomy and Physiology: Essentials for Respiratory Care II
This course is a continuation of RTH 149 and will cover oxygen transport, carbon dioxide transport, acid-base balance, blood gas interpretation, ventilation-perfusion relationships, control of ventilation, renal failure and its influence on the cardiopulmonary system and other topics related to their influence on the cardiopulmonary system. Emphasis will be placed on clinical application and related physiologic calculations. Prerequisite: RTH 149, RTH 119, BIO 108 and MAT 114.

RTH 160 1 0 0 1
Topics in General and Cardiopulmonary Surgery
This course is a lecture series on the vari-

ous general and cardiopulmonary surgeries. Emphasis will be on the general principles of anesthesia and pre- and postoperative respiratory care. Prerequisites: RTH 159 and BIO 169.

RTH 170 4 0 0 4
ECG and Hemodynamic Monitoring
This course is designed to provide the student with a knowledge of the electrocardiogram (ECG) and cardio-hemodynamic monitoring techniques and arterial-line insertion. Emphasis will be placed on cardiac dysrhythmia recognition, treatment protocol, performing the 12-lead ECG, advanced hemodynamic monitoring and related physiologic calculations. Prerequisites: RTH 159, RTH 150, and BIO 169.

RTH 180 3 0 0 3
Cardiopulmonary Diseases
The etiology, classification, diagnosis, progression, treatment, and prognosis of the most frequently encountered cardiopulmonary diseases will be discussed. Prerequisites: RTH 129, RTH 159 and BIO 169.

RTH 215 2 2 0 3
Ventilators
The technical aspects of adult mechanical ventilators will be taught. Emphasis will be placed on theory of operation of ventilator components, assembly of patient circuits and monitoring devices, as well as selected adult ventilators in current use. Prerequisite: RTH 129.

RTH 218 0 2 12 5
Clinical Experience IV
The student will begin rotations through the adult critical care areas where emphasis will be given to advanced airway management, hemodynamic monitoring and management of the patient-ventilator system. An introductory rotation through the cardiopulmonary lab will also be conducted. The pre-clinical laboratory will be utilized for student practice of procedures and techniques related to adult critical care. Prerequisites: RTH 113, RTH 160, RTH 170, and RTH 180. Corequisites: RTH 215, RTH 268 and RTH 220.

RTH 220 2 2 0 3
Adult Critical Care
This lecture and laboratory course will cover various topics related to the practice of respiratory care of the critically ill adult patient. Emphasis will be placed on management of the patient-ventilator system, advanced airway management and medical/surgical problems common in critically ill adult patients. Prerequisites: RTH 160, RTH 170, RTH 180 and RTH 113.

RTH 228 0 2 12 5
Clinical Experience V
The student will begin clinical rotations in neonatal and pediatric respiratory care and continue with adult critical care rotations. Emphasis will be placed on rotations in the cardiopulmonary lab. Prerequisite: RTH 215, RTH 218, RTH 250, and RTH 268.

RTH 230 3 2 0 4
Perinatal and Pediatric Respiratory Care
Normal growth, development, and anatomy and physiology of the newborn through pediatric age groups will be discussed. Essential pathologic processes and related treatment regimes will be covered. Neonatal and pediatric mechanical ventilators, management of the patient-ventilator system and other related neonatal/pediatric critical care topics will be covered in this course. Prerequisites: BIO 169, RTH 215, and RTH 220. Corequisite: RTH 228.

RTH 238 0 2 12 5
Clinical Experience VI
The student will begin clinical practice in specialty rotations through the neonatal/pediatric intensive care and general pediatric areas. A continuation of adult critical care rotations will also be conducted. The pre-clinical laboratory will be utilized to allow student practice of related skills, review and remediation opportunities, and clinical case and equipment presentations. Prerequisite: RTH 228. Corequisite: RTH 230.

RTH 241 1 0 0 1
Respiratory Care Department Operations
This course provides an overview of the administrative organization and operation of a modern respiratory care department. Personnel, interviewing, recruitment, staffing shortages, policy and procedure manuals, ongoing education, evaluations, scheduling, prospective payment, scope of practice, budgeting and Total Quality Management (TQM) will be addressed in this course. Prerequisite: RTH 228.

RTH 248 0 2 27 10
Clinical Experience VII
The student will gain further clinical expe-

rience through various rotations in the hospital, department of pulmonary medicine, and home care settings. Students will be given optional rotation opportunities in the areas of teaching, departmental operations, cardiopulmonary rehabilitation, neonatal intensive care and other specialty rotations. Emphasis will be placed on refinement of adult critical care skills. The pre-clinical laboratory will be utilized to allow student practice of related skills, comprehensive review and remediation opportunities, and clinical case presentations. Prerequisites: RTH 275, RTH 241, and RTH 238.

RTH 255 1 0 0 1

Seminar

This course will focus on advances in technology and cross-training within the respiratory care profession. Students will perform current research and present projects in class. Prerequisite: RTH 228 and ENG 100.

RTH 260 2 0 0 2

Trauma Care

This course will present major topics of trauma care and will focus on the role of the respiratory therapist in trauma management. Prerequisite: RTH 238.

RTH 268 1 2 0 2

Cardiopulmonary Diagnostic Testing

This course is designed to provide the respiratory care student with a comprehensive knowledge of diagnostic studies of the respiratory and cardiovascular system. Technical theory, manual calculation, equipment and interpretations of each diagnostic test will be presented. Prerequisites: RTH 170 and RTH 180.

RTH 275 2 0 0 2

Pulmonary Rehabilitation and Home Care

This course is designed to provide an overview of techniques utilized in patient evaluation for the pulmonary rehab patient. Emphasis is also placed on the home care of the pulmonary patient. Topics presented include: mechanical ventilation in the home, rehab and home care equipment, medication and diet, reconditioning exercises, patient and family education, patient discharge planning, home care versus durable medical equipment (DME) company, reimbursement guidelines and issues in gerontology. Prerequisite: RTH 228.

RTT 130 0 2 12 5

Radiographic Imaging I

Through clinical experience and laboratory exercises, this course concentrates on the operation of routine radiographic equipment; part positioning of the chest, abdomen and body extremities; and patient care techniques. Selection of radiographic exposure factors and the use of equipment accessories are also stressed. Prerequisite: RDT 114.

RTT 131 1 0 0 1

Radiation Therapy Positioning and Anatomy

Anatomy and routine projections of the vertebral column and cranium are discussed. Radiation therapy simulation is introduced with terminology, equipment, and accessories. Prerequisite: BIO 108 and RDT 139.

RTT 205 3 0 0 3

Radiation Therapy Physics I

Fundamental principles, concepts and terminology concerning the atom and the structure of matter are explored. The properties and basis for production of ionizing radiation are presented as applicable to radiation therapy. Prerequisites: BIO 108 and RTT 131.

RTT 206 3 0 0 3

Radiation Therapy Physics II

The means for production of gamma and x-radiation are studied. Measures of radiation quantity and treatment units are applied through laboratory sessions. Topics for discussion and laboratory sessions will include photon interactions and radioactivity. Prerequisite: RTT 205, RTT 214, and RTT 221.

RTT 207 3 0 0 3

Dosimetry I

Classroom and laboratory sessions present the basic concepts of clinical dosimetry and treatment planning. Delivery methods to include single and multiple beam techniques are discussed. Tumor localization and dose calculations are performed. Prerequisites: RTT 206, RTT 215, RTT 222, and RTT 227.

RTT 208 2 0 0 2

Dosimetry II

Consideration of more complex dosimetry and treatment planning directs students' experiences from manual to computer-performed calculations. The means for construction and application of treatment accessories are outlined. Prerequisite: RTT 207, RTT 236 and RTT 237.

RTT 214 3 2 12 8
Orientation to Radiation Therapy
This course introduces the students to the operation of the radiation therapy department, the role of the radiation therapy technologist, selected equipment, and patient care particular to the clinical setting. Basic procedures are observed through clinical and laboratory experience. Prerequisite: RTT 131.

RTT 215 3 0 0 3
Radiobiology
Course studies center on the biological effects of ionizing radiation, tissue sensitivity, and tissue response to irradiation. Methods of radiation protection applicable to tumor localization and treatment delivery are emphasized. Prerequisite: RTT 205, RTT 214, and RTT 221. Corequisite: RTT 206.

RTT 221 3 0 0 3
Clinical Oncology I
The first of a two-course series, this course promotes the study of malignant disease within anatomical systems. Staging and grading, etiology, spread and involvement of selected tumor types are outlined for discussion and possible implications in treatment delivery. Prerequisites: BIO 108 and RTT 131.

RTT 222 3 0 0 3
Clinical Oncology II
The study of malignant disease is continued from Clinical Oncology I to include disease processes of the various body systems. Methods of treatment significant to tumor type and location are discussed. Patient prognosis is examined to better understand the goals of radiation therapy. Prerequisite: RTT 205, RTT 214, and RTT 221.

RTT 227 0 2 15 6
Radiation Therapy Practicum I
One of three practicum courses, this course provides clinical experience in the use of equipment and patient positioning in both simulation and the delivery of radiation therapy treatments. The student is introduced to the varied aspects of the radiation therapy department and patient progression through evaluation, treatment and follow-up. Prerequisite: RTT 205, RTT 214, and RTT 221.

RTT 236 3 0 0 3
Radiation Therapy Procedures I
Treatment modalities are examined as to their application in treatment delivery. The overall treatment plan is evaluated as to equipment selection, beam modification, patient support, use of immobilization and possible contouring methods. Prerequisite: RTT 206, RTT 215, RTT 222, and RTT 227.

RTT 237 0 2 21 8
Radiation Therapy Practicum II
Technical skills are developed and refined within the departmental setting. Recognition of the provision for special patient needs is stressed. Routine exams are performed under supervision. Prerequisite: RTT 206, RTT 215, RTT 222, and RTT 227.

RTT 246 2 0 0 2
Radiation Therapy Procedures II
Routine as well as new techniques in treatment delivery are explored. Discussion promotes choices the technologist will make relating to tumor site and modality selection. Trends in therapeutic techniques are presented through investigation of current literature or independent study. Prerequisite: RTT 207, RTT 236, and RTT 237.

RTT 247 0 2 21 8
Radiation Therapy Practicum III
This course promotes clinical practice for the student on a more independent level of performance. The student utilizes equipment, accessories, patient care techniques and treatment considerations in the completion of radiation therapy procedures. Prerequisite: RTT 207, RTT 236, and RTT 237.

RTT 254 Departmental 2 0 0 2
Administration and Quality Assurance
This course investigates the operational aspects of a radiation therapy department. Organization and implementation of a departmental quality assurance program are discussed. Prerequisite: enrollment in 8th quarter Radiation Therapy curriculum.

SAF 101 1 2 0 2
First Aid and CPR
This course will certify the student in first aid and infant/child and adult CPR. Topics will include principles of responding to emergencies and techniques for handling common childhood injuries, accidents, and illnesses. Recommend: course to be taught by a certified representative of either American Heart Association or American Red Cross. Prerequisite: none.

SCI 101 3 0 0 3
General Science
This is a study of the basic concepts from biological, physical, and natural sciences. Prerequisite: none.

SCI 1001 3 2 0 4
Practical Physical Science
This course covers some of the basic concepts in physical science. Topics included are physical measurement, structure and properties of matter, energy-forms, production measurement and uses, gravity and friction. Emphasis on specific topics will be determined by the trade or vocational interests of the students involved. Prerequisite: none.

SOC 102 5 0 0 5
General Sociology
This is an introductory course in the principles of sociology. An attempt is made to provide an understanding of culture, collective behavior, community life, social institutions, and social change. It presents the scientific study of man's behavior in relation to other men, the general laws affecting the organization of such relationships, and effects of social life on human personality and behavior. Prerequisite: meet the required reading score on placement test to enter curriculum or permission of the department chairperson.

SOC 103 3 0 0 3
Sociology
The student will examine the social environment in which personality develops and matures and will analyze the major social institutions as well as the major social processes involved. Attention is given to the scope, methods, and concepts of sociology. Prerequisite: meet the required reading score on placement test to enter curriculum or permission of the department chairperson.

SOC 105 3 0 0 3
Families in the American Culture
This course is the study of the family in the American culture, changing patterns in family roles, the influence of socioeconomic status on family relationships, factors associated with cultural deprivation, and the effects on children in such families. Prerequisite: SOC 102 or 103.

SOC 211 3 0 0 3
Victimology
This course introduces the student to the study of crime victims. Emphasis will be placed on the role of the victim, characteristics of crime victims, conflicts between victims and the judicial system and the available assistance to victims. Prerequisite: none.

SON 101 3 2 0 4
Introduction to Sonography
This introductory course serves to explain all the applications of diagnostic medical sonography to the student. The history of sonography and sonographic medical terminology are taught. The laboratory portion introduces the student to basic abdominal scanning techniques. Prerequisite: admission into Medical Sonography curriculum.

SON 102 2 2 0 3
Medical Ethics and Patient Care
Considerations for study include technologist - patient communications, patient care techniques and body mechanics. Insights into medical ethics and law are also studied. Prerequisite: admission into health curriculum.

SON 103 4 2 0 5
Abdominal Ultrasound I
The first of two courses that focus on abdominal ultrasound. Sonographic abdominal anatomy and physiology is studied and correlated with laboratory exercises in abdominal scanning techniques. Prerequisite or Corequisite: SON 101.

SON 104 5 2 0 6
Abdominal Ultrasound II
The second of two courses that focuses on abdominal ultrasound. Abdominal pathology is studied in this course along with small parts anatomy, scanning techniques, and pathology. Gynecological scanning techniques are also covered in this course. Prerequisite: SON 103.

SON 105 4 0 0 4
Sonographic Physics & Instrumentation
Physics specific to sonography is studied in this course. The student is also introduced to the mechanics of the instrumentation of sonography equipment. Prerequisite: PHY 103.

SON 110 2 0 6 4
Practicum I
The first of a series of six clinical courses in which the student begins to apply the knowledge learned in the classroom to the clinical situation. The student attends a clinical site away from the main campus. The lecture portion of the course serves to bridge the classroom knowledge with the clinical experience. Prerequisite or Corequisite: SON 101 and SON 102.

SON 120 2 0 15 7
Practicum II
The second in a series of clinical courses in which the student applies classroom knowledge to the clinical situation. The student

attends a clinical site away from the main campus. The lecture portion serves to bridge the classroom knowledge with the clinical experience. Prerequisite: SON 110.

SON 130 2 0 24 10
Practicum III
The third in a series of clinical courses in which the student applies classroom knowledge to the clinical situation. The student attends a clinical site away from the main campus. The lecture portion serves to bridge the classroom knowledge with the clinical experience. Prerequisite: SON 120.

SON 201 4 0 0 4
Obstetrical Ultrasound I
The first of two courses which study obstetrical ultrasound. This course focuses on embryology and fetal development, embryological and fetal sonographic measurements and first trimester abnormalities. Transabdominal and transvaginal techniques are also compared in this course. Prerequisite: SON 130.

SON 202 3 0 0 3
Gynecological Ultrasound
The female pelvis and its anatomy are studied this quarter. Gynecological pathology is the focus of the second half of the course. Male pelvic anatomy and pathology is also studied. Prerequisite: SON 130.

SON 203 2 0 0 2
Case Studies I
This first of three courses in which case presentations are made by the student. The cases are interesting findings that the student comes across during clinical rotations. The student also studies statistics and case presentation methods. The student begins preliminary outline for a scientific exhibit. Prerequisite: SON 130.

SON 204 4 0 0 4
Obstetrical Ultrasound II
The second of two courses which focus on obstetrical ultrasound. This course will study obstetrical pathological states, and the methods used in ultrasound diagnosis of fetal anomalies. Prerequisite: SON 201.

SON 205 4 2 0 5
Vascular Sonography I
Doppler sonographic applications are studied in this course. Vascular hemodynamics along with peripheral anatomy are introduced. The laboratory portion focuses on vascular scanning techniques. Prerequisite: SON 210.

SON 206 2 0 0 2
Case Studies II
The second of three courses in which the student presents interesting cases found during clinical experiences. Each student researches each case using patient history and laboratory results. Correlative imaging techniques help with case presentations. Each presentation is critically analyzed by the other students in the group. The student completes a scientific exhibit using the North Carolina Ultrasound Society's guideline for scientific exhibits. Prerequisite: SON 203.

SON 207 4 0 0 4
Vascular Sonography II
The second of two courses that study doppler technique in sonography. The student learns of the abnormal findings in peripheral sonograms and learns the techniques for transcranial sonography. Prerequisite: SON 205.

SON 208 2 0 0 2
Case Studies III
The final in a series of three courses in which the student presents interesting studies done during clinical rotations. Again, critical analysis is done by the other students in the group. During this course a student may present a scientific exhibit at the North Carolina Ultrasound Society's annual meeting. Prerequisite: SON 206.

SON 210 2 0 24 10
Practicum IV
The fourth in a series of clinical courses in which the student applies classroom knowledge to the clinical situation. The student attends a clinical site away from main campus. The lecture portion serves to bridge the classroom knowledge with the clinical experience. Prerequisite: SON 130.

SON 220 2 0 24 10
Practicum V
The fifth in a series of clinical courses in which the student applies classroom knowledge to the clinical situation. The student attends a clinical site away from the main campus. The lecture portion serves to bridge the classroom knowledge with the clinical experience. Prerequisite: SON 210.

SON 230 2 0 24 10
Practicum VI
The sixth and last in a series of clinical

courses in which the student applies classroom knowledge to the clinical situation. The student attends a clinical site away from the main campus. The lecture portion serves to bridge the classroom knowledge with the clinical experience. Prerequisite: SON 220.

SPA 100 5 0 0 5
Introduction to Elementary Spanish
This course provides a basic introduction to the understanding, speaking, reading, and writing of elementary Spanish. Use of audio and video tapes is required. The course is required of any student who plans to take SPA 150-151 and who does not meet prerequisite for SPA 150. Prerequisite: none.

SPA 150 5 0 0 5
Intensive Elementary Spanish I
This course provides an intensive introduction to the understanding, speaking, reading, and writing of elementary Spanish. Use of audio and video tapes is required. Recommended only for students with previous foreign language experience. Prerequisites: satisfactory score on placement exams (required of all students who have previously studied Spanish) or SPA 100.

SPA 151 5 0 0 5
Intensive Elementary Spanish II
This course is a continuation of Spanish 150, an intensive introduction to the understanding, speaking, reading, and writing of elementary Spanish. Use of audio and video tapes is required. Prerequisites: completion of Spanish 150 with a grade of C or better or equivalent placement by examination.

SPA 250 5 0 0 5
Intermediate Spanish I
This course offers students a review of and expansion upon the essential points of Spanish grammar covered in the elementary level courses. It is designed to provide students with the opportunity to continue development of the language skills introduced in the earlier courses, i.e., understanding, speaking, reading and writing Spanish. Audio and video materials are required. Prerequisites: completion of SPA 151 or other first-year college level elementary Spanish course with a grade of C or better or placement by examination.

SPA 251 5 0 0 5
Intermediate Spanish II
This course offers students a review of and expansion upon the essential points of Spanish grammar covered in the elementary level courses and in the first intermediate course. Equal emphasis will be placed upon demonstrated mastery in reading, writing, speaking and listening to Spanish. Prerequisite: SPA 250 or equivalent course placement by examination..

WLD 1101 1 0 3 2
Basic Gas and Arc Welding
The course includes welding demonstrations given by the instructor and practice by the students. The safe and proper methods in the setup and operation of welding equipment are demonstrated. Practice is given in joining metals by torch welding, brazing, silver soldering, soft soldering, and shielded metal arc mechanical repair work. Prerequisite: none.

WLD 1111 0 0 3 1
Air Conditioning Welding
This course includes welding demonstrations by the instructor and practice by the students. The safe and proper methods in the setup and operation of welding equipment are demonstrated. Practice is given in brazing, braze welding, and hard and soft soldering of ferrous and nonferrous metals. Flame cutting methods are practiced as applicable to mechanical repair work that the air conditioning technician will encounter in the field of work. Prerequisite: none.

WLD 1113 1 0 3 2
Mechanical Testing and Inspection
This course covers the standard methods for mechanical testing of welds. Types of tests covered are bend, destructive, free bend, guided-bend, nick-tear, notched-bend, tee-bend, nondestructive, V-notch, and Charpy impact. Prerequisite: none.

WLD 1120 2 0 6 4
Oxyacetylene Welding and Cutting
This course provides an introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, and assembly of units. Welding procedures such as practice of puddling and carrying the puddle running flat beads; butt welding in the flat, vertical, and overhead positions; brazing; and hard and soft soldering are covered. Safety procedures are stressed throughout the program of instruction in the use of tools and equipment. The performance of mechanical testing and inspection to determine quality of the welds is made. Prerequisite: none.

WLD 1121 4 0 15 9
Basic Arc Welding
Arc welding power source capabilities, scope of functions, components, and their care and maintenance will be covered in the course. The significance of "F" numbered electrodes and their application in the welding process will be included. Development of manipulative skills needed to make correct welds in the flat position will be an objective of the course. Safe and correct arc welding practices will be demonstrated and will be required of the students. Prerequisite: none.

WLD 1121A 2 0 6 4
Basic Arc Welding (Part I)
This course is the first part of a two-part course that covers arc welding power source capabilities, scope of functions, components, and their care and maintenance. The significance of "F" numbered electrodes and their application in the welding process will be included. Development of manipulative skills needed to make correct welds in the flat position will be an objective of the course. Safe and correct arc welding practices will be demonstrated and will be required of the students. Prerequisite: none.

WLD 1121B 2 0 9 5
Basic Arc Welding (Part II)
This course is a continuation of WLD 1121A. Prerequisite: WLD 1121A.

WLD 1123 1 0 6 3
Inert Gas Welding
This course provides an introduction and practical operations in the use of inert gas-shielded arc welding. A study of the equipment, operation, safety, and practice in the various positions is made. A study of such topics as principles of operation, shielding gases, filler rods, process variations and applications, and manual and automatic welding are also made. Prerequisite: none.

WLD 1124 3 0 12 7
Advanced Arc Welding
This course includes extensive practice in welding in all positions. The micro-wire welding process and a study of such topics as principles of operation, nomenclature of machine, filler metals, and shielding gases are included. Prerequisite: WLD 1121.

WLD 1124A 2 0 9 5
Advanced Arc Welding (Part I)
This course is the first part of a two-part course that includes extensive practice in welding in all positions. The micro-wire welding process and a study of such topics as principles of operation, nomenclature of machine, filler metals, and shielding gases are included. Prerequisite: WLD 1121A and WLD 1121B.

WLD 1124B 1 0 3 2
Advanced Arc Welding (Part II)
This course is a continuation of WLD 1124A. Prerequisite: WLD 1124A.

WLD 1126 3 0 9 6
Advanced Inert Gas Welding
This course is a continuation of WLD 1123, Inert Gas Welding, with more theory and practice in inert gas welding. Both ferrous and nonferrous welding applications are covered. Inert spot welding, CO2 welding, gas-metal arc, and automatic welding are taught. Special consideration is given to shielding gases. Prerequisite: WLD 1123.

WLD 1128 1 0 6 3
Welding Procedures and Practices
This course provides an introduction to practical applications for certification procedures according to A.W.S. D1.1 as well as welding and preparing test coupons. Prerequisites: WLD 1120, WLD 1121, and WLD 1124. Corequisite: WLD 1126.

WLD 1129 2 0 9 5
Basic Gas Metal Arc Welding (MIG)
This course will provide instruction in the basic use of the constant potential gas metal arc welding equipment (MIG). Prerequisite: none.

WLD 1130 2 0 6 4
Applied Basic GMAW and Gas Welding
This course includes welding demonstrations given by the instructor and practice by the students. The safe and correct methods of assembling and operating welding equipment are emphasized. Practice is given in joining and surfacing of ferrous metal by brazing, braze welding, and fusion welding. The study and practice of the operations of GMAW process will be included with reference to the effects of expansion and contraction to minimize warpage of auto body components. Oxyacetylene flame cutting is practiced as applicable to auto body and chassis repair work. Prerequisite: none.

WLD 1150 1 0 3 2
This course includes welding demonstrations given by the instructor and practice by the students. The safe and proper methods

in the set-up and operation of the welding equipment are demonstrated. Practice is given in joining plastics by a hand-held torch. Prerequisite: none.

Faculty/Staff Directory

FACULTY/STAFF DIRECTORY

BOARD OF TRUSTEES

Chairman	**Gordon B. Hughes**
Vice Chairman	**Joyce E. Glass**
Secretary	**Dr. Desna L. Wallin**

APPOINTED BY THE GOVERNOR

Joyce E. Glass ***1996***
Registered Nurse, Medical Park Hospital
John T. Eagan, Jr. ***1997***
President, Community Management Corp.
R. Michael Wells ***1998***
Attorney, Wells Jenkins Lucas & Jenkins
Robert F. Joyce ***1999***
Administrative Assistant, Sheriff of Forsyth County

APPOINTED BY COUNTY COMMISSIONERS

Brenda Q. Hutchins ***1996***
Designer/Manufacturer, Lady B. Goode
Charles R. Linville ***1997***
Owner Retail Business (Retired)
Gordon B. Hughes ***1998***
AT&T (Retired)
C. David Kepple ***1999***
Investment Broker, Legg Mason Wood, Walker

APPOINTED BY WINSTON-SALEM/ FORSYTH COUNTY BOARD OF EDUCATION

Dr. Kenneth M. Sadler ***1996***
D.D.S./Administrator, Dental Care Plan, Inc.
Dr. William F. Sayers ***1997***
M.D./Director of Clinical Improvement, Forsyth Memorial Hospital
Dewitt E. Rhoades ***1998***
CEO, DERA, Inc.
Jeffrey R. McFadden ***1999***
Attorney, Womble Carlyle Sandridge & Rice

APPOINTED BY STUDENT GOVERNMENT ASSOCIATION

Current SGA President ***Elected Annually***
(Nonvoting Member)

ADMINSTRATIVE OFFICE

Dr. Desna L. Wallin
President
Dr. Susan R. Allred
Executive Vice President, Institutional Planning and Support Services
T. Glen Fleeman, Jr.
Executive Vice President, Instructional Services
Kenneth W. Jarvis
Vice President, Business Services
James A. Rousseau
Vice President, Community Relations And Development
Vacant
Vice President, Corporate and Continuing Education
Marvin L. Allen
Associate Vice President and Dean, Business Technologies
Donald C. Shoaf
Assistant Vice President and Dean, Health Technologies
L. T. Williams
Assistant Vice President and Dean, Continuing Education
Dr. Adeline E. Fain
Dean, Arts and Sciences
Dr. Anne R. Hennis
Dean, Economic Development and Quality Initiatives
Dr. Sarah E. Hutslar
Dean, College Advancement and Research
George H. Kahl, Jr.
Dean, Engineering Technologies
Dr. Susan Q. Phelps
Dean, Student Development Services
Larry V. Weaver
Dean, Human Resources/Evening Programs
Vacant
Dean, Information Systems

CURRICULUM DEPARTMENT HEADS

ASSOCIATE IN APPLIED SCIENCE DEGREE

Accounting
Alice B. Sineath
Administrative Office Technology
Patricia G. Dalton
Architechtural Technology
Herbert I. Burns
Associate Degree Nursing
Phyllis D. Sample
Automation/Robotics Technology
Thomas M. Roth Jr.
Banking and Finance
Jeffery L. Tuttle
Business Administration
Thomas R. Staley
Business Computer Programming
Stanley D. Grady Jr.
Computer Engineering Technology
William H. Marotz
Criminal Justice
George L. McSwain Jr.
Drafting and Design Engineering Technology
Donald G. Sutphin

Early Childhood Associate
Patricia M. Whisnant
Electronics Engineering Technology
William H. Wheat, Interim
Film and Video Production Technology
Vacant
Horticulture Technology
Harold L. Atkins
Mechanical Engineering Technology
Ronald A. Dery
Marketing And Retail
Sallie S. Yena
Medical Assisting
Vacant
Medical Sonography
Anne B. Conner
Microcomputer Systems Technology
B.J. Sineath
Nuclear Medicine
Ronald G. Harkness
Paralegal Technology
Through Davidson County Community College
Physical Therapy Assistant
Through Catawba Valley Community College
Radiation Therapy Technology
Christina R. Gibson
Radiologic Technology
Carolyn M. Holland
Respiratory Care Technology
Perry W. Sheppard

ARTS AND SCIENCES
Humanities
Linda M. Lee
Life Sciences
Shelton D. Goforth
Mathematics
Tommy R. Hinson
Physical Sciences
Alvin S. Metts
Social Sciences
Leslie L. Neumann

VOCATIONAL DIPLOMA
Air Conditioning, Heating, and Refrigeration
Thomas M. Tinnes
Auto Body Repair
C.W. Clodfelter
Auto Mechanics
William B. Wilder
Diesel Vehicle Maintenance
Joe S. Sechrest
Electrical Installation
Kenneth D. Hanes
Electronic Servicing
Daniel O. Foltz
Graphic Arts-Printing
Garry H. Day
Machinist
Robin N. Petree
Plumbing and Pipefitting
E. Ike Brown
Practical Nursing
Carolyn T. Rajacich
Residential Carpentry
Odell H. Grose Jr.
Welding
Rodney T. Smith

TECHNICAL SPECIALTY DIPLOMA
Vascular/Cardiovascular Interventional Technology
Jilda Wheaton-Dunn

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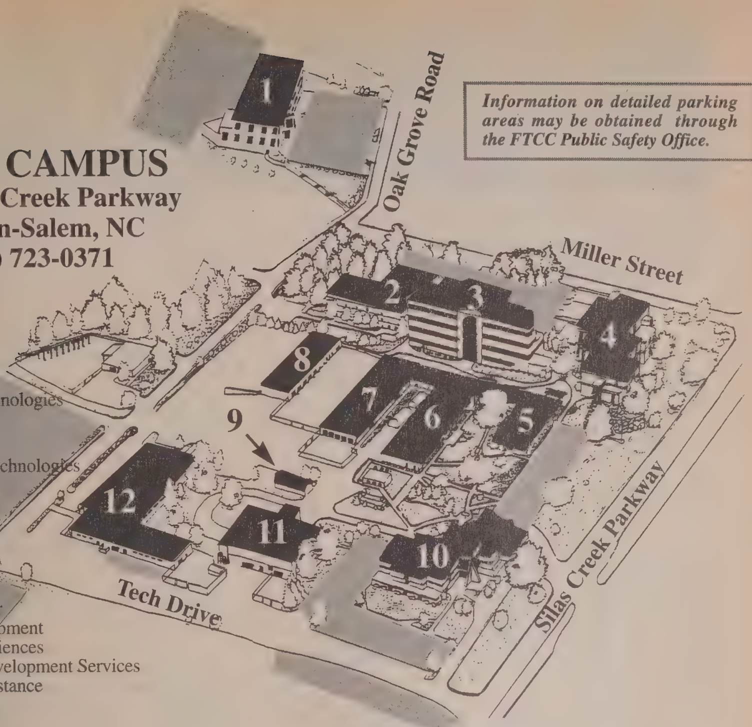
MAIN CAMPUS

2100 Silas Creek Parkway
Winston-Salem, NC
(910) 723-0371

Information on detailed parking areas may be obtained through the FTCC Public Safety Office.



1 **Bob Greene Hall**
Dean, Health Technologies
Classrooms/Labs

2 **Hauser Hall**
Dean, Business Technologies
Cafeteria
Classrooms/Labs

3 **Allman Center**
President's Office
Admissions
Classrooms
Counseling Center
Economic Development
Dean, Arts and Sciences
Dean, Student Development Services
Employment Assistance
Financial Aid
Information Desk
JTPA
Learning Center
Planning and Development
Records
Single Parent/WINS/Displaced Homemaker
Small Business Center Director's Office

4 **Ardmore Hall**
Auditorium A & B
Cashier's Office
Classrooms
Library
Personnel Office

5 **Parkway Building**
Marketing & Publications
Pretechnical Department

6 **Winston Building**
Dean, Engineering Technologies
Classrooms

7 **Salem Building**
Classrooms/Workshops

8 **Forsyth Building**
Classrooms/Workshops

9 **Carolina Annex**
Public Safety

10 **Snyder Hall**
Bookstore
Classrooms
Faculty/Staff Service Center
Student Activities/SGA Office

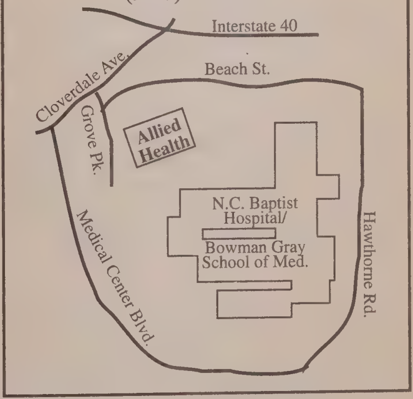
11 **Piedmont Building**
Classrooms/Workshops

12 **Carolina Building**
Classrooms/Workshops
Environmental Services

▨ **Parking**
Visitor parking is available in front of the Allman Center for approximately 40 cars. Additional parking is available at Bob Greene Hall or any of the areas shaded in gray.

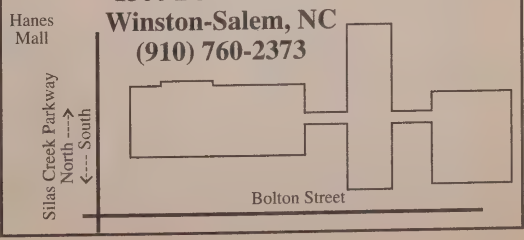
ALLIED HEALTH

1990 Beach Street
Winston-Salem, NC
(910) 723-0371



WEST CAMPUS

1300 Bolton Street
Winston-Salem, NC
(910) 760-2373



Terms to Know

To help you with words used by FTCC faculty and staff, here is a list of frequently used terms and their definitions.

Academic standing: Entering students must earn a grade point average (GPA) of 2.0 by the end of their first quarter and maintain a GPA of 2.0 thereafter.

Accreditation: Various professional agencies appoint teams of evaluators who periodically study Forsyth Tech's programs and services to ensure that they meet standards of quality and are relevant to the college's purpose.

Adult Continuing Education: This division provides noncredit courses for citizens who are 18 years old or older. The opportunities are based on individual need and previous educational achievement.

Advisor: A person who approves the selection of courses for your chosen field of study and is usually a faculty member or counselor in the Counseling Center.

Associate in Applied Science: A two-year technical degree that prepares you for the job market.

Associate in Arts: A two-year college transfer program that concentrates on humanities and social sciences for those planning to continue in a bachelor's degree program in a senior college.

Associate in Science: A two-year college transfer program that concentrates on mathematics and physical sciences for those planning to continue in a bachelor's degree program in a senior college.

Audit: A course for which you pay tuition and fees but do not receive credit. An Audit Request Form is available in the Counseling Center or from the appropriate division dean.

Catalog: The publication you can get in the Admission's Office that contains almost everything you need to know about FTCC and its programs.

Certificate: A program of study generally requiring one year or less of course work.

Contact hours: The actual number of hours in class per week, per course.

Counselor: A person who provides you with personal, academic, vocational, and career counseling.

Credit hours: Every class is worth a value called a credit hour. Every degree, diploma and certificate program requires you to take a certain number of credit hours.

Cumulative grade point average (GPA): The average of your grades for all classes taken at FTCC. It is calculated by adding all earned quality points and dividing by the number of credit hours taken.

Curriculum: The program of courses required to receive a degree, diploma or certificate in your chosen area of study.

Diploma: **Vocational** curriculums that usually take four quarters to complete. Courses are not designed to transfer to a 4-year school.
Adult High School: A program that allows adults to complete high school courses and credits for an Adult High School diploma.
GED: Persons who have not completed high school may choose to take a series of tests that correspond to most high school curriculums to determine if they qualify for a high school equivalency diploma.

Division: An academic area within the college. FTCC has five: Arts and Sciences, Business Technologies, Adult Continuing Education, Engineering Technologies, and Health Technologies.

Drop/Add: When you adjust your schedule by dropping courses you registered for but no longer wish to take, and/or adding other courses. The Drop/Add period is limited and is indicated on the calendar.

Electives/Unrestricted electives: A course which is not specifically named in your curriculum, but is required to graduate. Check with your academic advisor before choosing an elective.

Financial aid: Grants (monies given to students through the federal and state government), scholarships, and student loans are available to qualified students to help you meet your educational expenses.

Full-time student: A student who is taking a least 12 credit hours. A student who is registered for 11 credit hours or fewer in one quarter is a part-time student.

Independent study: A credit course, allowed only in special circumstances, in which you work individually with a faculty member.

Plagiarize: Using ideas or words of another as your own without crediting the source. Plagiarism is a form of cheating.

Practicum: A course that offers hands-on experience in the workplace.

Prerequisites: Preliminary skills, knowledge or other courses which are required before your enrollment in a particular course. Prerequisites are listed by course and course description in the catalog. Descriptions are alphabetized by course prefix.

Pretechnical program: This program offers a series of courses for preparation, remediation, and academic guidance if you do not meet the entrance requirements for the curriculum of your choice.

Probation: You are placed on academic probation when your GPA falls below 2.0.

Proficiency test: You may, under certain conditions, take an exam and receive credit for a course without having taken the course. You will not receive a grade, just the credit hours.

SGA - Student Government Association: You can get involved in SGA activities by contacting the student activities facilitator in the Carolina Annex.

Special credit student: A student who is taking one or more curriculum credit courses, but who is not enrolled in a specific curriculum.

Student activity fee: The fee you pay every quarter that covers activities, (cookouts, dances, etc.) part of graduation expenses, and the student newspaper.

Transcript: A printed record of every course you've taken at FTCC and the grades you've received. An official transcript is stamped with the seal of the college. Transcripts are obtained, at a cost of $2.00, from the Records Office.

Workstudy: A federally supported program through which students, primarily from low-income families, are given preference for part-time employment on campus.

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